

VILNIAUS UNIVERSITETAS
MATEMATIKOS IR INFORMATIKOS
FAKULTETAS

VILNIUS UNIVERSITY
FACULTY OF MATHEMATICS
AND INFORMATICS

Research
and
Publications
Report

2005

Editor: V. Mackevičius

© VU Matematikos ir informatikos fakultetas, 2006

CONTENTS

Faculty of Mathematics and Informatics	5
Department of Mathematical analysis	5
Department of Differential equations and numerical analysis	6
Department of Probability theory and number theory	7
Department of Mathematical statistics	8
Department of Computer science	9
Department of Didactics of mathematics	10
Department of Computer science II	11
Department of Software engineering	13
Department of Econometric analysis	14
Department of Mathematical computer science	15
Habilitation procedures	16
Doctoral theses	16
Publications	17
Articles: Journals with ISI SC Index	17
Articles: International reviewed journals, books, and ISI proceedings	19
Articles: Lithuanian licensed journals	21
Articles: Other journals and proceedings	25
Submitted for publication in 2005	28
Preprints and Technical Reports	30
Conference reports in 2005	32
XLVI Conference of Lithuanian Mathematical Society	32
Other conference reports	34
Books, textbooks, lecture notes (in Lithuanian)	39
Other publications (in Lithuanian)	40
Other lectures and reports	41
Scientific contacts	42
Participation in international projects	42
Visits by staff	43
Foreign visitors	45
Grants, awards	45
Appendix	47
Publications appeared in 2000–2004	47
2000	47
2001	54
2002	61
2003	69
2004	76
Submitted for publication in 2004 (not appeared in 2005)	86
Name index	87

FACULTY OF MATHEMATICS AND INFORMATICS

<http://www.mif.vu.lt>

Dean Prof. Feliksas Ivanauskas
tel. (370–5) 233 60 28, fax. (370–5) 215 15 85
feliksas.ivanauskas@maf.vu.lt

DEPARTMENT OF MATHEMATICAL ANALYSIS*

<http://www.mif.vu.lt/katedros/mak>

Head Prof. Vygaantas Paulauskas
tel. (370–5) 233 60 31
vygaantas.paulauskas@maf.vu.lt

Traditionally, the department gives courses in mathematical analysis (calculus) and related subjects. In recent years, the department became more oriented towards applications by offering several courses in actuarial and financial mathematics. The research areas of the department include probability limit theorems in infinite-dimensional spaces, heavy-tailed distributions, time series, econometric models, stochastic analysis, complex-variable function theory.

G. Bakštys. Actuarial mathematics. gintaras.bakstys@maf.vu.lt

K. Gadeikis. Doctoral student: change-point estimation, heavy-tailed distributions. gadeikis@ldr.lt

A. Juozulynas. Limit theorems for stable laws (convergence rates and asymptotic expansions). almas@ieva.maf.vu.lt, almantas@sintagma.lt

A. Klivečka. Doctoral student: statistics for estimating of roughness of random functions. a.klivecka@sigmatelas.lt

A. Lenkšas. Numerical solution of SDEs. sparnai@delfi.lt

K. Liubinskas. Convergence rates in limit theorems of probability theory. kestas@ieva.maf.vu.lt

V. Mackevičius. Stochastic analysis. Stochastic numerics. vigirdas.mackevicius@maf.vu.lt, <http://www.mif.vu.lt/~vigirdas>

E. Misevičius. Mathematical analysis.

J. Navikas. Doctoral student: Runge–Kutta methods for SDEs. jnavikas@hotmail.com, jnavikas@takas.lt

S. Norvidas. Mathematical analysis; complex, harmonic, and functional analysis. norvidas@ieva.maf.vu.lt

*The departments are listed in the order of foundation.

V. Paulauskas. Probability limit theorems in functional spaces. Approximations of multidimensional stable laws. Autoregressive models.

vygantas.paulauskas@maf.vu.lt

A. Petrov. Doctoral student.

andrej.petrov@mif.vu.lt

A. Plikusas. Sampling in official statistics. Regression ratio estimators.

plikusas@ktl.mii.lt

D. Surgailis. Long memory. Fractional integration. Self-similar processes. Financial mathematics.

sdonatas@ktl.mii.lt

R. Zovė. Doctoral student: random Cantor-type sets.

rzove@centras.lt

Publications. Journals with ISI SC Index – 1; Intern. reviewed journals, books, and ISI proceedings – 1; Lithuanian licensed issues – 1; Other journals and proceedings – 0; Submitted – 4.

DEPARTMENT OF DIFFERENTIAL EQUATIONS AND NUMERICAL ANALYSIS

<http://www.mif.vu.lt/katedros/dlsm/homea>

Head Doc. Vladas Skakauskas

tel. (370–5) 233 60 33

vladas.skakauskas@maf.vu.lt

Professors of the department give courses on differential equations (ODE and PDE), numerical analysis, optimization methods, applied mathematics, calculus (at the Faculties of Economics, Chemistry, and Natural Sciences), and various more specialized lectures. The main research fields of the department are ordinary and partial differential and integrodifferential equations, their numerical analysis, and applied mathematics.

A. Ambrazevičius. Solvability of parabolic-type PDEs. algis@ieva.maf.vu.lt

V. Daukšas. Optimization methods. vaclovas.dauksas@maf.vu.lt

J. Degutis. Spectral problems of ODEs. juozas.degutis@maf.vu.lt

A. Domarkas. Solvability of nonlinear Schrödinger-type equations. aleksas@ieva.maf.vu.lt

P. Katauskis. Solvability of parabolic-type PDEs. pranas.katauskis@takas.lt

A. Kavaliauskas. Asymptotic analysis of dynamic systems. algis.kavaliauskas@mif.vu.lt

M. Meilūnas. Numerical analysis of parabolic problems. mecislovas.meilunas@fm.vtu.lt

K. Pileckas. Navier–Stokes equations. pileckas@ktl.mii.lt

G. Purėškis. Schrödinger-type differential equations. gintaras.puriuskis@maf.vu.lt

V. Skakauskas. Population dynamics. vladas.skakauskas@maf.vu.lt

D. Sūdžiūtė. Theory of games. daina.sudziute@maf.vu.lt

Publications. Journals with ISI SC Index – 2; Intern. reviewed journals, books, and ISI proceedings – 0; Lithuanian licensed issues – 3; Other journals and proceedings – 0; Submitted – 0.

DEPARTMENT OF PROBABILITY THEORY AND NUMBER THEORY

<http://www.mif.vu.lt/katedros/ttsk/homea>

Head Prof. Antanas Laurinčikas

tel. (370–5) 233 22 28

antanas.laurincikas@maf.vu.lt

Professors of the department give courses in algebra, number theory, probability theory, discrete mathematics, and various more specialized lectures in the directions mentioned. They also give lectures on calculus at the Faculties of Physics, Economics, and Communications. Their main scientific interests are related to the algebraic, analytic, and probabilistic number theories and combinatorics. A great attention is also paid to neighboring problems of probability theory, to the development of Lithuanian mathematical thought, and to popularization of mathematical sciences.

P. Drungilas. Doctoral student: Algebraic numbers, polynomials.

paulius.drungilas@mif.vu.lt

A. Dubickas. Algebraic numbers, distribution modulo 1.

[arturas.dubickas@mif.vu.lt,](mailto:arturas.dubickas@mif.vu.lt)

<http://www.mif.vu.lt/~dubickas>

R. Garunkštis. Analytic number theory. Zeta-functions.

[ramunas.garunkstis@mif.vu.lt,](mailto:ramunas.garunkstis@mif.vu.lt)

<http://www.mif.vu.lt/~garunkstis>

R. Ivanauskaitė. Doctoral student: zeta-functions of cusp forms.

iv.ruta@gmail.com

H. Jasiūnas. History of mathematics.

[henrikas.jasiunas@mif.vu.lt,](mailto:henrikas.jasiunas@mif.vu.lt)

http://www.mif.vu.lt/katedros/ttsk/bylos/ja/ja_a

A. Javtokas. Doctoral student: Geometric zeta-functions. ajavtokas@math.com

A. Kačėnas. Value distribution of the Riemann zeta-function.

[audrius.kacenas@mif.vu.lt,](mailto:audrius.kacenas@mif.vu.lt)

http://www.mif.vu.lt/katedros/ttsk/bylos/ka/ka_a

J. Kubilius. Analytic and probabilistic number theory. History of mathematics.

[jonas.kubilius@mif.vu.lt,](mailto:jonas.kubilius@mif.vu.lt)

http://www.mif.vu.lt/katedros/ttsk/bylos/ku/ku_a

A. Laurinčikas. Analytic and probabilistic number theory. Value distribution of zeta-functions. [antanas.laurincikas@mif.vu.lt,](mailto:antanas.laurincikas@mif.vu.lt)

http://www.mif.vu.lt/katedros/ttsk/bylos/lau/lau_a

R. Macaitienė. Doctoral student: Discrete-value distribution of general Dirichlet series. renata.m@centras.lt

E. Manstavičius. Probabilistic number theory. Analytic and probabilistic combinatorics.
eugenijus.manstavicius@maf.vu.lt,

http://www.mif.vu.lt/katedros/ttsk/bylos/man/man_a

H. Markšaitis. Algebraic number theory and the Galois theory.

hamletas.marksaitis@maf.vu.lt,

http://www.mif.vu.lt/katedros/ttsk/bylos/mar/mar_a

G. Misevičius. Probabilistic theory of expansions of numbers and functions.

gintautas.misevicius@maf.vu.lt,

http://www.mif.vu.lt/katedros/ttsk/bylos/mis/mis_a

J. Norkūnienė. Doctoral student: The laws of iterated logarithm in probabilistic combinatorics.
jolita.norkuniene@mif.vu.lt

J. Šiaulys. Limits laws in probabilistic number theory. Distributions of additive functions with rational argument. The insurance mathematics.

jonas.siaulys@mif.vu.lt,

http://www.mif.vu.lt/katedros/ttsk/bylos/siau/siau_a

S. Zamarys. Doctoral student: moments of L -functions.

Publications. Journals with ISI SC Index – 16; Intern. reviewed journals, books, and ISI proceedings – 9; Lithuanian licensed issues – 12; Other journals and proceedings – 5; Submitted – 13.

DEPARTMENT OF MATHEMATICAL STATISTICS

<http://www.mif.vu.lt/katedros/msk>

Head Prof. Vilijandas Bagdonavičius

tel. (370–5) 213 63 90

algirdasbag@techas.lt

The main research areas at the department: theoretical and applied mathematical statistics, reliability and survival analysis, stochastic analysis, limit theorems in probability theory and mathematical statistics, operation research, Markov processes, nonlinear dynamics.

V. Bagdonavičius. Reliability theory. Mathematical statistics, survival analysis, and their applications.
algirdasbag@techas.lt

A. Bikelis. Asymptotic analysis of quasi-lattice distributions.

algimantas.bikelis@maf.vu.lt

V. Čiočys. Mathematical models of economics.

R. Eidukevičius. Mathematical modeling. Experimental planning and statistical analysis in oncology.
rimantas.eidukevicius@sc.vu.lt

B. Grigelionis. Stochastic analysis and applications. Mixed exponential processes and models of stock returns.
broniusg@ktl.mii.lt, jurgita@ktl.mii.lt

V. Kazakevičius. Mathematical statistics. Nonlinear stochastic dynamic systems.
vytautas.kazakevicius@maf.vu.lt

J. Kruopis. Mathematical statistics, quality control, and their applications.

R. Levulienė. Mathematical statistics, reliability, survival analysis.

ruta.levuliene@maf.vu.lt

I. Masiulaitytė. Doctoral student.

R. Maslovskis. Doctoral student.

R. Paulauskas. Doctoral student.

A. Šukys. System analysis and modeling. Optimization, automatization, and control of complex systems.

J. Turkuvienė. Doctoral student.

M. Vaičiulis. Statistical analysis of stochastic processes.

marius@ktl.mii.lt

P. Vaitkus. Large-deviation probabilities. Neural networks. Nonlinear time series.

A. Zaikina. Doctoral student.

Publications. Journals with ISI SC Index – 3; Intern. reviewed journals, books, and ISI proceedings – 4; Lithuanian licensed issues – 5; Other journals and proceedings – 2; Submitted – 4.

DEPARTMENT OF COMPUTER SCIENCE

<http://www.mif.vu.lt/katedros/cs/Welcome>

Head Doc. Antanas Mitašiūnas

tel. (370–5) 233 60 35

antanas.mitasiunas@maf.vu.lt

The department supervises the education in informatics for the students in bachelor, master, and doctor programs. Research areas: software process, semantics of programs, artificial intelligence, retrieval of logical proofs, real-time systems, converter construction, error-correcting codes.

A. Adamonis. Support and maintenance process modeling.

andrius.adamonis@maf.vu.lt

A. Birštunas. Multi-agent modal logics.

adomas.birstunas@mif.vu.lt

V. Dičiūnas. Neural networks. Complexity of algorithms.

valdas.diciunas@maf.vu.lt

A. Janeliūnas. Neural net based classification algorithms. Object-oriented database systems.

arunas.janeliunas@verslas.com

A. Mitašiūnas. Software process. Electronic signature.

antanas.mitasiunas@maf.vu.lt

S. Norgėla. Automated theorem proving.

stasys.norgela@maf.vu.lt

E. Povilonis. Signal acquisition and analysis.

edvardas.povilonis@maf.vu.lt

Š. Raudys. Neural networks. Statistical and neural classifiers.

raudys@ktl.mii.lt

G. Skersys. Error-correcting codes.

gintaras.skersys@maf.vu.lt

A. Svirskas. Collaborative process automation support using service level agreements and intelligent dynamic agents. Choreographed B2B collaboration: service-oriented frameworks for adaptable, manageable, secure, and trusted interactions.

adomas.svirskas@maf.vu.lt

V. Tumasonis. Comparison of programming languages. Computer algebra. IT standards. vladas.tumasonis@maf.vu.lt

R. Vaicekauskas. Numerical solution of Schrödinger equations.

rimantas.vaicekauskas@maf.vu.lt

J. Žagūnas. Structured documents converting.

jonas.zagunas@maf.vu.lt

Publications. Journals with ISI SC Index – 2; Intern. reviewed journals, books, and ISI proceedings – 4; Lithuanian licensed issues – 8; Other journals and proceedings – 3; Submitted – 3.

DEPARTMENT OF DIDACTICS OF MATHEMATICS

<http://www.mif.vu.lt/katedros/mmk>

Head Doc. Eugenijus Stankus

tel. (370–5) 233 23 38

eugenijus.sankus@maf.vu.lt

The department supervises mathematics teachers training. The research areas of the department include the mathematical education at secondary school, college, and university levels.

A. Apynis. Game theory. Social decisions. Didactics of mathematics.

antanas.apynis@maf.vu.lt

V. Dagienė. Computer science.

dagiene@ktl.mii.lt

E. Gaigalas. Quadratic forms. Problems of mathematical education.

edmundas.gaigalas@maf.vu.lt

R. Kudžma. Mathematical analysis. Didactics of mathematics, semiotics. Actuarial mathematics. ricardas.kudzma@maf.vu.lt

R. Kašuba. Developing of mathematical skill; modern elementary mathematics; didactics of mathematics; mathematical contests; high-school and university pedagogics; mathematics and arts. romualdas.kasuba@maf.vu.lt

R. Laucius. Programming teaching.

rimga@ktl.mii.lt

Š. Repšys. Dynamic models of physiological structure of population.

sarunas.repsys1@mif.vu.lt

E. Stankus. Analytic and probabilistic number theories. Didactics of mathematics.

eugenijus.stankus@maf.vu.lt

Publications. Journals with ISI SC Index – 0; Intern. reviewed journals, books, and ISI proceedings – 0; Lithuanian licensed issues – 4; Other journals and proceedings – 12; Submitted – 0.

DEPARTMENT OF COMPUTER SCIENCE II

<http://www.mif.vu.lt/katedros/cs2/katedhp>

Head Prof. Feliksas Ivanauskas

tel. (370–5) 233 60 32

feliksas.ivanauskas@maf.vu.lt

The research areas at the department include methods and applications of nonlinear and computational modeling, computational geometry, methods of computer vision, digital image, speech and signal processing, data structures and algorithms, Internet technology and information systems. The results of research are to be applied to problems of computer software, physics and mathematics, natural sciences, as well as to topics of medicine, linguistics, and social sciences.

T. Anbinderis. Doctoral student.

bsa@takas.lt

A. Bastys. Medical signal analysis. Differential equations with nonlocal boundary condition.
algirdas_bastys@yahoo.com

L. Būtenas. Doctoral student: context extraction from semi-structural and textual information.
linas.butenas@mif.vu.lt

A. Čivilis. Doctoral student: managing moving objects in location-based services, spatial data mining, and geographic information systems.
alminas.civilis@mif.vu.lt

J. Dabulytė-Bagdonavičienė. Computer modeling of wave propagation in nonhomogenous media, modeling of heat distribution in lasers.
jurgita.dabulyte@ktu.lt

E. Garška. Applications of computer animation, fundamentals of sensor, physical phenomena in solid-acoustic resistance.
gega@takas.lt

F. Ivanauskas. Numerical analysis of nonlinear diffusion equations. Modeling of physical problems.
feliksas.ivanauskas@mif.vu.lt

J. Ignatavičiūtė. Computer vision.
jolita.ignataviciute@maf.vu.lt

A. Juozapavičius. Algorithms of computer vision and computer graphics, applications in databases and Internet-based systems.
algimantas.juozapavicius@mif.vu.lt

K. Karčiauskas. Computer-aided geometric design. Multisided rational surface patches.
kestutis.karciauskas@mif.vu.lt

P. Kasparaitis. Speech synthesis.
pkasparaitis@yahoo.com

D. Kašliakovas. Doctoral student: computer modeling of diffusion equations with nonlocal conditions.
dmka@takas.lt

I. Kaunietis. Investigation of amperometric biosensor response.
irmantas.kaunietis@ktu.lt

M. Kazakevičiūtė. Computer-aided geometric design.
margarita.kazakeviciute@mif.vu.lt

A. Kisel. Doctoral student.
andrej.kisel@mif.vu.lt

A. Kočetkov. Doctoral student.
alexej@takas.lt

J. Kranauskas. Doctoral student.
justas@atrodo.com

- R. Krasauskas.** Computer-aided geometric design. Applications of algebraic geometry and topology.
rimvydas.krasauskas@maf.vu.lt
- E. Kutka.** Doctoral student: data mining in network calculus, computer networks.
eduardas.kutka@maf.vu.lt
- B. Lapcun.** Doctoral student: computer simulations of synthesis of yttrium aluminum garnet.
bogdanl@vtex.lt
- T. Meškauskas.** Numerical analysis of nonlinear evolutionary models; $1/f$ noise.
tadas.meskauskas@maf.vu.lt
- K. Mickus.** Visualization algorithms for indices of mobile and fast moving objects.
kazimieras.mickus@maf.vu.lt
- S. Narkevičius.** Computer-aided geometric design. Subdivision surfaces.
saulius.narkevicius@maf.vu.lt
- K. Navickis.** Intrinsic normalizations of distributions of flags on grassmannians of affine spaces.
kazimieras.navickis@mif.vu.lt
- M. Pelanis.** Data structures and algorithms for temporal data and indexing the history of moving objects.
mindaugas.pelanis@maf.vu.lt
- M. Puida.** Doctoral student: modeling of laser beam phase.
mantasp@azuolas.ktu.lt
- A. Raguotis.** Doctoral student: computer modeling of self-organized fronts: propagation of a bistable front.
araguotis@alna.lt
- V. Rapševičius.** Doctoral student: algorithms and models for data mining and pattern recognition in geology.
v.rapsevicius@it.lt
- Š. Repsys.** Doctoral student: dynamic models of physiological structure of population.
sarunas.repsys@mif.vu.lt
- A. Risovas.** Doctoral student: financial violation risk management in Lithuanian state tax administration environment. Data mining and visualization.
a.risovas@it.lt
- T. Sakalauskas.** Doctoral student: real-time computer graphics methods.
tomas.sakalauskas@prewise.lt
- O. Štikonienė.** Numerical methods for nonlinear PDEs and problems with nonlocal boundary conditions.
olgast@ktl.mii.lt
- S. Zubė.** Algebraic geometry; curves and surfaces; computer-aided geometric design; subdivision, number theory.
severinas.zube@maf.vu.lt

Publications. Journals with ISI SC Index – 4; Intern. reviewed journals, books, and ISI proceedings – 5; Lithuanian licensed issues – 14; Other journals and proceedings – 5; Submitted – 9.

DEPARTMENT OF SOFTWARE ENGINEERING

[**Head Doc. Saulius Ragaišis**](http://www.mif.vu.lt/katedros/se>WelcomeSE</p></div><div data-bbox=)

tel. (370–5) 213 38 98

saulius.ragaisis@maf.vu.lt

The department supervises the software engineering study program. The research areas of the department include software process, software engineering methods, software quality management, information systems modeling, geographic information systems, applied software systems, modeling of physical processes, document archiving, document configuration, semantics of loop programs operating with recurrences, electronic signature.

R. Baronas. Nonlinear diffusion and reaction processes. Methods ensuring data integrity.
romas.baronas@maf.vu.lt, <http://www.mif.vu.lt/~baronas>

D. Čiukšys. Object-oriented analysis and design; distributed system architectures; Internet technologies; software process.
donatas.ciuksys@maf.vu.lt

V. Čyras. Conceptual modeling in law. Formalization of the goal concept in law. Data dependencies in loop programs. Programming with recurrences. Semantics of loop programs over recurrent data dependencies.
vytautas.cyras@maf.vu.lt

S. Dapkūnas. Information system design. Evaluation of software products.
sigitas.dapkunas@sc.vu.lt

A. Kurtinaitis. Numerical simulation of polarization of beam quality changes.
andrius.kurtinaitis@maf.vu.lt

K. Lapin. Human computer interaction. Teaching informatics and mathematics.
kristina.lapin@maf.vu.lt, <http://www.mif.vu.lt/~moroz/lapin>

I. Naujikas. Software process improvement. Modern development technologies.
irmantas.naujikas.@maf.vu.lt

S. Ragaišis. Software process. Modeling of information systems.
saulius.ragaisis@maf.vu.lt

V. Undžėnas. Electronic signature.
valdas.undzenas@sc.vu.lt

Publications. Journals with ISI SC Index – 0; Intern. reviewed journals, books, and ISI proceedings – 1; Lithuanian licensed issues – 10; Other journals and proceedings – 1; Submitted – 3.

DEPARTMENT OF ECONOMETRIC ANALYSIS

<http://www.mif.vu.lt/katedros/eka>

Head Prof. Alfredas Račkauskas

tel. (370-5) 233 60 23

alfredas.rackauskas@maf.vu.lt

Research areas of the department include financial mathematics, time series analysis, functional data analysis, limit theorems in probability and their applications to statistics and econometrics, bootstrap and other resampling methods in statistics and econometrics.

D. Celov. Doctoral student: long-memory time series models in macroeconomics.

dcelov@ktl.mii.lt

V. Čekanavičius. Signed compound Poisson approximations. Kolmogorov's problem.

vydas.cekanavicius@maf.vu.lt

S. Dranickaitė. Doctoral student: estimating Value at Risk with multivariate time series models.

sandra@vb.lt

A. Elijo. Doctoral student: statistical methods in educational sample surveys.

aistuciuke@hotmail.com

M. Juodis. Doctoral student: limit theorems for dependent random variables.

juodis@centras.lt

V. Kvedaras. Macroeconometrics.

virmantas.kvedaras@ef.vu.lt, irus@centras.lt

R. Lapinskas. Regression methods in ecology and medicine.

remigijus.lapinskas@maf.vu.lt

R. Leipus. Financial mathematics and econometrics. Time series analysis.

remigijus.leipus@maf.vu.lt, http://www.mif.vu.lt/~remis

A. Maldeikienė. Macroeconomics.

mausra@delfi.lt

V. Maniušis. Empirical characteristic functions, applications in econometrics.

vtas@hotmail.com

F. Mišeikis. Theory of summation of random variables.

feliksas.miseikis@mif.vu.lt

G. Murauskas. Information systems. Computer statistics; online education of statistics. SQL databases and WWW.

gediminas.murauskas@maf.vu.lt, http://www.ts.vu.lt

R. Norvaiša. Financial mathematics and mathematical economics.

norvaisa@ktl.mii.lt

A. Račkauskas. Probability limit theorems in functional spaces, applications in statistics and econometrics.

alfredas.rackauskas@maf.vu.lt,

<http://www.mif.vu.lt/katedros/eka/asm-psl/alfredas/alfredas>

M. Radavičius. Nonparametrical and adaptive estimation; econometrics; classification; image analysis.

mrad@ktl.mii.lt

M. Valužis. Doctoral student: mathematical models in pricing of credit derivatives.

mantas.valuzis@email.lt

V. Zemlys. Doctoral student: functional limit theorems for summation processes.

vaidotas.zemlys@maf.vu.lt

D. Zuokas. Doctoral student: testing epidemic change in mean and variance.
danaz78@one.lt, danas.zuokas@mif.vu.lt

Publications. Journals with ISI SC Index – 4; Intern. reviewed journals, books, and ISI proceedings – 0; Lithuanian licensed issues – 9; Other journals and proceedings – 2; Submitted – 6.

DEPARTMENT OF MATHEMATICAL COMPUTER SCIENCE

<http://www.mif.vu.lt/matinf/indexa>

Head Prof. Mindaugas Bloznelis

tel. (370–5) 233 60 22

mblozn@ieva.maf.vu.lt

The department was established in 2002 in order to consolidate teaching and research activities in the areas of information theory, cryptography, algorithms, and discrete mathematics. The research focuses on probabilistic analysis of number-theoretical structures, combinatorial statistics, and randomized algorithms.

G. Bareikis. Arithmetical functions in the polynomial semigroup.

gintautas.bareikis@maf.vu.lt,

http://www.mif.vu.lt/katedros/matinf/asm/bg/bg_a

M. Bloznelis. Probability limit theorems and combinatorial statistics.

mblozn@ieva.maf.vu.lt,

<http://www.mif.vu.lt/katedros/matinf/asm/mb/mba>

R. Grigutis. Structure of homogeneous Abelian groups of finite rank.

rimantas.grigutis@maf.vu.lt,

http://www.mif.vu.lt/katedros/matinf/asm/gr/gr_a

A. Mačiulis. Mean values and limit theorems for arithmetic functions.

algirdas.macilis@maf.vu.lt,

http://www.mif.vu.lt/katedros/matinf/asm/ma/ma_a

V. Stakėnas. Probabilistic number theory, functions of Farey fractions.

vilius.stakenas@maf.vu.lt,

<http://www.mif.vu.lt/katedros/matinf/asm/vs/vs0>

G. Stepanauskas. Mean values and limit theorems for arithmetic functions.

gediminas.stepanauskas@maf.vu.lt,

http://www.mif.vu.lt/katedros/matinf/asm/ste/ste_a

V. Zacharovas. Probabilistic combinatorics. vytas.zacharovas@mif.vu.lt,

http://www.mif.vu.lt/katedros/matinf/asm/ste/ste_a

<http://www.mif.vu.lt/~vytzach/en/index>

Publications. Journals with ISI SC Index – 1; Intern. reviewed journals, books, and ISI proceedings – 1; Lithuanian licensed issues – 2; Other journals and proceedings – 1; Submitted – 0.

HABILITATION PROCEDURES

1. **R. Baronas**, Computer simulation and research of nonlinear diffusion and reaction processes in nonhomogeneous media, 2005, Vilnius University (review of research papers presented for the habilitation procedure).
2. D. Jurgaitis, Structure of solutions of first-order degenerate partial differential equation systems, 2005, Vilnius University (review of research papers presented for the habilitation procedure).

DOCTORAL THESES

1. **J. Dabulytė-Bagdonavičienė**, Computer simulation of diffusion and heat processes in nonhomogeneous media. Advisor prof. **F. Ivanauskas**.
2. **V. Garbaliauskienė**, The universality of L -functions of elliptic curves. Advisor prof. **A. Laurinčikas**.
3. **J. Genys**, Limit theorems and joint universality for general Dirichlet series. Advisor prof. **A. Laurinčikas**.
4. **M. Kazakevičiūtė**, Blending of natural quadrics with rational canal surfaces. Advisor doc. **R. Krasauskas**.

PUBLICATIONS

Abbreviations:

<i>LMR</i>	<i>Lietuvos Matematikos Rinkinys</i>
<i>LMJ</i>	<i>Lithuanian Mathematical Journal</i> [*]
<i>NAMC</i>	<i>Nonlinear Analysis: Modelling and Control, ISSN 1392–5133</i> (Vilnius)
<i>ProcFPM</i>	<i>Proceedings of Scientific Seminar of Faculty of Physics and Mathematics, Šiauliai University</i>
<i>Voronoi–2005</i>	<i>Voronoi's Impact on Modern Science. Book 3: Proceedings of the Third Voronoi Conference on Analytic Number Theory and Spatial Tessellations, H. Syta et al. (Eds.), Institute of Mathematics, Kyiv, 2005 (Mathematics and its Applications, Proceedings of the Institute of Mathematics of the National Academy of Sciences of Ukraine, 55.)</i>
<i>TMRP–2005</i>	<i>Proceedings VI International Conference Teaching Mathematics: Retrospective and Perspectives, May 13–14, 2005, Vilnius University, Lithuania.</i>

Articles: Journals with ISI Science Citation Index

1. **V. Bagdonavičius**^{**}, **A. Bikėlis**, and **V. Kazakevičius**, Nonparametric confidence intervals for the number of spares required for a renewable system, *Communications in Statistics. Theory and Methods*, Philadelphia: Taylor Francis Group 2005, **34**(5), 1203–1212.
2. **M. Bložnelis**, Orthogonal decomposition of symmetric functions defined on random permutations, *Combinatorics, Probability and Computing*, 2005, **14**, 249–268.
3. **V. Bagdonavičius**, M. Nikulin, Statistical analysis of survival and reliability data with multiple crossings of survival functions, *C. R. Acad. Sc. Paris, Ser. I*, 2005, **340**(5), 377–382.
4. A. Bikėlis, see [1].
5. Z. Bliznikas, K. Breivė, R. Gaška, G. Kurilčik, A. Novickovas, R. Stanikūnas, A. Švėgžda, M. S. Shur, **R. Vaicekauskas**, H. Vaitkevičius, V. Viliūnas, and A. Žukauskas, Polychromatic solid-state lamps versus tungsten radiator: hue changes of Munsell samples, *J. Physics D: Applied Physics*, 2005, **38**(17), 3202–3207.
6. **D. Celov**, F. M. Andersen, D. Grinderslev, and A. Kazlauskas, A macro-econometric model of Lithuania LITMOD, *Economic Modelling*, 2005, **22**(4), 707–719.
7. **A. Čivilis**, Ch. S. Jensen, and S. Pakalnis, Techniques for Efficient Road-Network-Based Tracking of Moving Objects, *IEEE Transactions on Knowledge and Data Engineering*, 2005, **17**(5), 698–712.

^{*}*Lithuanian Mathematical Journal* is a completely English version (published by Springer) of *Lietuvos Matematikos Rinkinys*; in the latter, articles are in Russian (about 60%), in English (40%), and, episodically, in French and German.

^{**}Boldface print is used for emphasizing the names of the faculty members.

7. **A. Dubickas** and C. J. Smyth, Length of the sum and product of algebraic numbers, *Math. Notes*, 2005, **77**(6), 787–793.
8. **A. Dubickas** and M. J. Mossinghoff, Auxiliary polynomials for some problems regarding Mahler’s measure, *Acta Arithmetica*, 2005, **119**(1), 65–79.
9. **A. Dubickas** and Y. Bugeaud, Fractional parts of powers and Sturmian words, *C. R. Acad. Sci. Paris, Ser. I*, 2005, **341**, 69–74.
10. **A. Dubickas**, There are infinitely many limit points of the fractional parts of powers, *Proc. Indian Acad. Sci. (Math. Sci.)*, 2005, **115**(4), 1–7.
11. **A. Dubickas**, and C. J. Smyth, Two variations of a theorem of Kronecker, *Expositiones Mathematicae*, 2005, **23**, 289–294.
12. **A. Dubickas**, Zero and coefficient inequality, *Amer. Math. Monthly*, 2005, **112**(1), 91–92.
13. **A. Dubickas**, and A. Novikas, Integral parts of powers of rational numbers, *Math. Zeitschr.*, 2005, **251**(3), 635–648.
14. **R. Eidukevičius**, G. Bernatonienė, I. Narkevičiūtė, and E. Kavaliūnaitė, Clinical presentation of pertussis in fully immunized children in Lithuania, *BMC Infectious Diseases*, 2005, **5**, S:40, <http://www.biomedcentral.com/content/pdf/1471-2334-5-40.pdf>
15. **R. Garunkštis** and J. Steuding, Simple zeros and discrete moments of the derivative of the Riemann zeta-function, *J. Number Th.*, 2005, **115**(2), 310–321.
16. **F. Ivanauskas**, A. Kareiva, and **B. Lapcun**, On the modelling of solid state reactions. Synthesis of YAG, *J. Math. Chemistry*, 2005, **37**(4), 365–376.
17. **F. Ivanauskas**, I. Kaunietis, V. Laurinavičius, J. Razumienė, and R. Šimkus, Computer simulation of the steady state currents at enzyme doped carbon paste electrodes, *J. Math. Chemistry*, 2005, **38**(3), 355–366.
18. R. Kačinskaitė, **A. Laurinčikas**, Joint value distribution of the Matsumoto zeta-functions, *Integral Transforms and Special Functions*, 2005, **16**(5–6), 415–422.
19. **P. Kasparaitis**, Diphone databases for Lithuanian text-to-speech synthesis, *Informatika*, 2005, **16**(2), 193–202.
V. Kazakevičius, see [1].
20. A. Laukaitis and **A. Račkauskas**, Functional data analysis for clients segmentation tasks, *European J. Operat. Res.*, 2005, **163**(1), 210–216.
B. Lapcun, see [16].
21. **A. Laurinčikas**, On the derivatives of zeta-functions of certain cusp forms, *Glasgow Math. J.*, 2005, **47**, 87–96.
22. **A. Laurinčikas**, On the derivatives of zeta-functions of certain cusp forms. II, *Glasgow Math. J.*, 2005, **47**, 505–516.
23. **A. Laurinčikas**, K. Matsumoto, and J. Steuding, Discrete universality of L -functions for new forms, *Math. Notes*, 2005, **78**(3–4), 551–558.
24. **A. Laurinčikas** and J. Steuding, A limit theorem for the Hurwitz zeta-function with an algebraic irrational parameter, *Archiv der Mathematik*, 2005, **85**, 419–432.
25. **A. Laurinčikas**, Limit theorems for the Esterman zeta-function. I, *Stat. Probab. Letters*, 2005, **72**, 227–235.

26. **A. Laurinčikas**, Joint universality of general Dirichlet series, *Izvestiya RAN: Ser. Matem.*, 2005, **69**(1), 133–144 (in Russian) = *Izvestiya: Mathematics*, 2005, **69**(1), 131–142.
27. **A. Laurinčikas** and **S. Zamarys**, Asymptotics for the mean value of normalized zeta-functions of certain cusp forms, *Integral Transforms and Special Functions*, 2005, **16**(5-6) 437–450.
A. Laurinčikas, see [18].
28. **R. Leipus**, **V. Paulauskas**, and **D. Surgailis**, Renewal regime switching and stable limit laws, *J. Econometrics*, 2005, **129**, 299–327.
V. Paulauskas, see [28].
29. **K. Pileckas**, Existence of Solutions with the prescribed flux of the Navier–Stokes system in an infinite cylinder, *J. Math. Fluid Mechanics*, published online, Issue 1 of 32, 2005, 22 p.
30. **A. Račkauskas** and C. Suquet, Central limit theorems in Hölder topologies for Banach space valued random fields, *Th. Probab. Appl.*, 2004, **49**(1), 77–92.
A. Račkauskas, see [20].
31. **Š. Raudys** and I. Žliobaitė, Prediction of commodity prices in rapidly changing environments, *Lect. Notes Comp. Sc.*, 2005, **3686**, 154–163.
32. **V. Skakauskas**, A two-sex population dynamics model with strong parental care, *Nonlinear Analysis: Real World Appl.*, 2005, **6**(4), 609–636.
D. Surgailis, see [28].
R. Vaicekauskas, see [4].
S. Zamarys, see [27].

Articles: International reviewed journals, books, and ISI proceedings

33. **V. Bagdonavičius**, and M. Nikulin, Analysis of survival data with non-proportional hazards and crossings of survival functions, In: Recent Advances in Quantitative Methods in Cancer and Human Health Risk Assessment, John Wiley and Sons, Chichester, 2005, 197–210.
34. **V. Bagdonavičius**, M. Hafdi, and K. Himdi, Statistical analysis of the generalized linear proportional hazards model, *J. Math. Sc.*, 2005, **127**(1), 1673–1681.
35. **V. Bagdonavičius**, L. Gerville-Reache, and M. Nikulin, Statistical modelling, planning and inference in accelerated trials, *Qualité et Sûreté de Fonctionnement*, **1**, Actes du Congrès, Bordeaux, 2005, 349–357.
36. **V. Bagdonavičius**, and M. Mikulin, Aging and degradation models in reliability and safety, *Communications in Dependability and Quality Management*, 2005, **8**(3), 5–10.
37. **R. Baronas**, **F. Ivanauskas**, and J. Kulys, Mathematical modelling of biosensors with perforated and selective membranes, *J. Structural Mechanics: special issue XVIII Nordic Sem. Comput. Mechanics, October 17–30, 2005*, 2005, **38**(3), 63–66.
38. **L. Būtėnas** and **A. Juozapavičius**, Ontological approach for document classification in transport domain, *Proc. IX Intern. Conf. Transport Means 2005, October 20–21, 2005*, Kaunas, 207–210.

39. C. Cabrelli, U. Molter, **V. Paulauskas**, and R. Shonkwiler, Hausdorff measure of p -Conator sets, *Real Analysis Exchange*, 2005, **30**(2), 413–434.
40. **A. Čivilis**, Design of a web mapping service for a truck-monitoring Internet portal, *Proc. IX Intern. Conf. Transport Means 2005, October 20–21, 2005, Kaunas*, 139–142.
41. **A. Dubickas**, Divisibility properties of certain recurrent sequences, *Zapiski Nauchn. Semin. POMI*, 2005, **322**, 76–82.
42. **A. Dubickas**, Algebraic, arithmetic and geometric properties of Mahler measures, *Proc. Inst. Math. Acad. Sc. Belarus*, 2005, **13**(1), 70–74.
43. **A. Dubickas**, Two exercises concerning the degree of the product of algebraic numbers, *Publ. Inst. Math.*, 2005, **78**(92).
44. V. Garbaliauskienė and **A. Laurinčikas**, Some analytic properties for L -functions of elliptic curves, *Proc. Inst. Math. National Acad. Sc. Belarus*, 2005, **13**(1), 75–82.
45. **R. Garunkštis**, Note on the zeros of the Hurwitz zeta-function, *Voronoi–2005*, 10–12.
46. **R. Ivanauskaitė** and **A. Laurinčikas**, Value distribution of zeta-functions of certain cusp forms, *Voronoi–2005*, 13–26.
F. Ivanauskas, see [37].
47. **A. Juozapavičius** and **E. Kutka** The model of passenger transportation system and database implementation in an information system, *Proc. IX Intern. Conf. Transport Means 2005, October 20–21, 2005, Kaunas*, 230–233.
A. Juozapavičius, see [38].
48. R. Kačinskaitė and **A. Laurinčikas**, A joint limit theorem for Matsumoto zeta-functions, *Voronoi–2005*, 27–32.
E. Kutka, see [47].
49. **A. Laurinčikas**, A limit theorem for the Hurwitz zeta-function with algebraic irrational parameter, *Zapiski Nauchn. Sem. POMI*, 2005, **322**, 125–134.
50. **A. Laurinčikas**, Limit theorems for the Estremann zeta-function. II, *Central European J. Math.*, 2005, **3**(4), 580–590.
A. Laurinčikas, see [44].
A. Laurinčikas, see [46].
A. Laurinčikas, see [48].
51. **T. Meškauskas** and B. Kaulakys, $1/f$ noise in fractal quaternionic structures, *Proc. XVIII Intern. Conf. Noise and Fluctuations, 19–23 September, Salamanca, Spain, 2005*, New York, 2005, 91–94.
V. Paulauskas, see [39].
52. R. Roberts and **A. Svirskas**, Implementation options for virtual organisations: A peer-to-peer (P2P) approach, In: *Virtual Enterprise Integration: Technological and Organisational Perspectives*, Idea Group publishers, 2005, 398–414.
<http://www.idea-group.com/books/details.asp?id=4666>.
53. R. Roberts and **A. Svirskas**, Request based virtual organisations (RBVO): An implementation scenario, *Pro Ve2005, 26–28 September, Valencia, Spain, IFIP, Eds.*

- L. M. Camarinha-Matos, H. Afsarmanesh, and A. Ortiz*, 2005, Springer, 17–24.
<http://www.springer.com/sgw/cda/frontpage/0,11855,4-147-22-63899580-0,00.html>
54. **A. Svirskas**, M. Wilson, A. Arenas, E. Lupu, N. Tupuk, P. Gambiagi, D. Chadwick, T. Dimitrakos, and B. Roberts, Aspects of trusted and secure business oriented VO management in service oriented architectures, *I IEEE Intern. Workshop Service Oriented Solutions for Cooperative Organizations (SoS4CO '05), July 19, 2005 = Proc. VII IEEE Intern. Conf. E-Commerce Technology*, IEEE Computer Society, 2005, 3–11.
http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=1521004&isnumber=32538,
<http://portal.acm.org/citation.cfm?id=1097303&coll=GUIDE&dl=GUIDE&CFID=59627244&CFTOKEN=4004408>.
55. **A. Svirskas**, A. Arenas, M. Wilson, and B. Matthews, Secure and trusted virtual organization management, *ERCIM News* **63**, October 2005, *SPECIAL: Security and Trust Management*, http://www.ercim.org/publication/Ercim_News/enw63/wilson.html.
A. Svirskas, see [52].
A. Svirskas, see [53].
56. **V. Zacharovas**, Convergence rate for some additive function on random permutations, *Analysis*, 2005, **25**, 113–121.

Articles: Lithuanian licensed journals

57. **A. Adamonis** and **I. Naujikas**, **A. Mitašiūnas**, and **S. Ragaišis**, Software process capability assessment in small software companies, *Information Sciences*, 2005, **34**, 243–251 (in Lithuanian).
58. **A. Adamonis**, **I. Naujikas**, **A. Mitašiūnas**, **S. Ragaišis**, and M. Reingardtas, Dependencies of processes capability levels, *Inform. Techn. Control*, 2005, **34**(2A), 202–208.
59. **A. Apynis** and **E. Stankus**, School mathematics and university studies, *LMJ*, 2005, **45**(spec. issue), 247–249 (in Lithuanian).
60. **J. Artamonova** and **R. Leipus**, Continuous-time approximation of short-term interest rates in generalized Ho–Lee framework, *LMR*, 2005, **45**(3), 287–314 (in Russian) = *LMJ*, 2005, **45**(3), 235–256.
61. E. Atkočiūnas, R. Blake, **A. Juozapavičius**, and M. Kazimianec, Image processing in road traffic analysis, *NAMC*, 2005, **10**(4), 315–332.
62. **R. Baronas**, Realization of business rules with priorities in active database systems, *Information Sciences*, **34**, 2005, 125–129 (in Lithuanian).
63. **R. Baronas** and K. Petrauskas, An investigation of the effectiveness of indexing for data warehouses, *Information Sciences*, **34**, 2005, 172–175 (in Lithuanian).
64. **R. Baronas**, **F. Ivanauskas**, and J. Kulys, Modeling biosensors with perforated membrane, *LMJ*, 2005, **45**(spec. issue), 449–453 (in Lithuanian).
65. **R. Baronas**, **F. Ivanauskas**, and **P. Vaitkus**, **R. Paulauskas**, Classification of concentration of mixture of analytes using a generalized regression of the main components, *LMJ*, 2005, **45**(spec. issue), 454–458 (in Lithuanian).
66. **A. Bastys**, **F. Ivanauskas**, and M. Sapagovas, An explicit solution of a parabolic equation with nonlocal boundary conditions, *LMR*, 2005, **45**(3), 315–332 = *LMJ*, 2005, **45**(3), 257–271.

67. V. Bendinskas, G. Mikaliūnas, **A. Mitašiūnas**, and **S. Ragaišis**, Towards mature software process, *Inform. Techn. Control*, **34**(2A), 2005, 209–214.
68. **A. Bikėlis** and **J. Turkuvienė**, Generalized z -distributions and Cornish–Fisher expansions, *LMJ*, 2005, **45**(spec. issue), 380–384 (in Lithuanian).
69. **A. Bikėlis** and **J. Turkuvienė**, Transformations of random variables, *LMJ*, 2005, **45**(spec. issue), 335–338 (in Lithuanian).
70. **A. Birštunas**, Efficient decision procedure for Belief modality, *LMJ*, 2005, **45**(spec. issue), 321–325.
71. K. Breivė, Z. Bliznikas, G. Kurilcik, A. Novickovas, **R. Vaicekauskas**, R. Gaška, M. S. Shur, and A. Žukauskas, Semiconductor quadrichromatic lamp for general lighting, *Elektronika ir elektrotehnika*, 2005, **1**(57), 74–79 (in Lithuanian).
72. **V. Čekanavičius** and **A. Elijio**, Lower bound estimates for Poisson approximations, *LMR*, 2005, **45**(4), 501–524 (in Russian) = *LMJ*, 2005, **4**, 405–423.
73. **V. Čyras**, Formalising the goal concept in law, *Information Sciences*, 2005, **34**, 111–118 (in Lithuanian).
74. **J. Dabulytė** and **F. Ivanauskas**, Application of the total approximation method for the investigation of the temperature regime of a polychromatic solid-state lamp, *NAMC*, 2005, **10**(2), 107–117.
75. **V. Dagienė** and **R. Laucius**, Designing a localization course, *LMJ*, 2005, **45**(spec. issue), 213–218 (in Lithuanian).
76. **V. Dagienė** and R. Laucius, Components of information technology curricula, *Information Sciences*, 2005, **34**, 59–66 (in Lithuanian).
77. **S. Dapkūnas** and **K. Lapin**, Creating a learning-object structure for an introductory course of informatics, *LMJ*, 2005, **45**(spec. issue), 203–207 (in Lithuanian).
78. **S. Dapkūnas** and **K. Lapin**, Improving the quality of e-learning materials, *Information Sciences*, 2005, **34**, 54–58 (in Lithuanian).
79. **A. Elijio** and **G. Murauskas**, Structural modelling of reading achievement for Lithuanian students, *LMJ*, 2005, **45**(spec. issue), 2005, 347–353.
A. Elijio, see [72].
80. **K. Gadeikis** and **V. Paulauskas**, On the estimation of a changepoint in a tail index, *LMR*, 2005, **45**(3), 333–348 = *LMJ*, 2005, **45**(3), 272–283.
81. **R. Garunkštis**, Growth of the Lerch zeta–function, *LMR*, 2005, **45**(1), 45–56 = *LMJ*, 2005, **45**(1), 34–43.
82. **R. Ivanauskaitė**, On the argument of zeta–functions of certain cusp forms, *LMJ*, 2005, **45**(spec. issue), 30–34.
83. **F. Ivanauskas** and **M. Radžiūnas**, The convergence and stability of splitting finite-difference schemes for nonlinear evolutionary equations, *LMR*, 2005, **45**(3), 413–434 = *LMJ*, 2005, **45**(3), 334–352.
84. **F. Ivanauskas**, **A. Raguotis**, and R. Bakanas, Retarded accelerations of the self-organized front: propagation of the bistable front under step-like force, *Lith. J. Physics*, 2005, **45**(3), 153–160.

85. **F. Ivanauskas**, V. Laurinavičius, R. Šimkus, and **I. Kaunietis**, Computer simulation of the steady-state current at enzyme doped carbon paste electrodes, *LMJ*, 2005, **45**(spec. issue), 481–485 (in Lithuanian).
86. **F. Ivanauskas**, **R. Lapinskas**, and M. Žalakevičius, First spring arrival response to climate warming in birds, *LMJ*, 2005, **45**(spec. issue), 481–485.
87. **F. Ivanauskas** and **M. Puida**, Light beam phase retrieval in nonlinear media: a computer simulation, *LMJ*, 2005, **45**(spec. issue), 504–508.
88. **F. Ivanauskas**, **I. Kaunietis**, V. Laurinavičius, and R. Šimkus, Apparent Parameters of Enzymatic Plate-Gap Electrode, *NAMC*, 2005, **10**(3), 211–221.
- F. Ivanauskas**, see [64].
- F. Ivanauskas**, see [65].
- F. Ivanauskas**, see [66].
- F. Ivanauskas**, see [74].
89. **A. Javtokas**, The Boolean zeta-function, *LMJ*, 2005, **45**(spec. issue), 35–38.
90. **M. Juodis** and **A. Račkauskas**, A remark on self-normalization for dependent random variables, *LMR*, 2005, **45**(2), 173–183, = *LMJ*, 2005, **45**(2), 142–151.
- A. Juozapavičius**, see [61].
91. **A. Kačėnas**, **A. Laurinčikas**, and **S. Zamarys**, On fractional moments of Dirichlet L -functions, *LMR*, 2005, **45**(2), 208–228 (in Russian) = *LMJ*, 2005, **45**(2), 173–191.
- I. Kaunietis**, see [88].
- I. Kaunietis**, see [85].
92. **A. Kavaliauskas**, Hopf bifurcation on a tumor model, *LMJ*, 2005, **45**(spec. issue), 78–82 (in Lithuanian).
93. **M. Kazakevičiūtė**, Classification of pairs of natural quadrics from the point of view of Laguerre, *LMR*, 2005, **45**(1), 64–83 (in Russian) = *LMJ*, 2005, **45**(1), 50–65.
94. B. Kryžienė and **G. Misevičius**, Large deviations for endomorphisms of torus, II, *LMJ*, 2005, **45**(spec. issue), 42–46.
95. **J. Kruopis** and A. Vaišvila, The conytol using more rigid control limits, *Electronics and Electrotechnics*, 2005, **1**(57), 62–66 (in Lithuanian).
96. **J. Kruopis**, **R. Levulienė**, S. Grobovas, and A. Vaišvila, Kinescope classification using methods of mathematical statistics, *Electronics and electrotechnics*, 2005, **5**(61), 43–47 (in Lithuanian).
- K. Lapin**, see [77].
- K. Lapin**, see [78].
- R. Lapinskas**, see [86].
97. **A. Laurinčikas**, Value distribution of general Dirichlet series. VI, *NAMC*, 2005, **10**(3), 235–246.
- A. Laurinčikas**, see [91].
- R. Leipus**, see [60].
- R. Levulienė**, see [96].

98. **R. Macaitienė**, Joint discrete limit theorems in the space of analytic functions for general Dirichlet series, *LMR*, 2005, **45**(1), 104–116 (in Russian) = *LMJ*, 2005, **45**(1), 84–93.
99. **R. Macaitienė**, A discrete limit theorem on the complex plane for one class of general Dirichlet series, *LMJ*, 2005, **45**(spec. issue), 47–50.
100. **A. Mačiulis** and **J. Šiaulys**, On the local distance between arithmetical distributions, *LMR*, 2005, **45**(4), p.603–610 (in Russian) = *LMJ*, 2005, **45**(4), 487–494.
101. **E. Manstavičius**, The Poisson law for linear statistics of random permutations, *LMR*, 2005, **45**(4), 537–552 (in Russian) = *LMJ*, 2005, **45**(4), 487–492.
- G. Misevičius**, see [94].
- A. Mitašiūnas**, see [57].
- A. Mitašiūnas**, see [58].
- A. Mitašiūnas**, see [67].
- G. Muraukas**, see [79].
- I. Naujikas**, see [57].
- I. Naujikas**, see [58].
102. **K. Navickis**, Geometry of two-parametric family of linear line complexes, *LMJ*, 2005, **45**(spec. issue), 97–101 (in Lithuanian).
103. **K. Navickis**, Osculating paraboloid, *LMJ*, 2005, **45**(spec. issue), 102–107 (in Lithuanian).
104. **S. Norgėla** and A. Belovas, Sequent calculus Sk4 for scolemized formulas, *LMJ*, 2005, **45**(spec. issue), 316–320.
105. **S. Norgėla**, A path calculus for modal logic S4, *LMR*, 2005, **45**(1), 117–126 (in Russian) = *LMJ*, 2005, **45**(1), 94–101.
106. **J. Norkūnienė**, The law of iterated logarithm for combinatorial multisets, *LMJ*, 2005, **45**(spec. issue), 51–56.
- R. Paulauskas**, see [65].
- V. Paulauskas**, see [80].
- M. Puida**, see [87].
107. **G. Puriuškis**, On estimating the blow-up time of a solution of the Schrödinger equation, *LMJ*, 2005, **45**(spec. issue), 83–86 (in Russian).
108. **A. Račkauskas** and Ch. Suquet, Estimation of change points of infinite dimensional parameters in short epidemics, *LMR*, 2005, **45**(4), 2005, 567–586 (in French) = *LMJ*, **45**(4), 2005, 458–474.
109. **A. Račkauskas** and **V. Zemlys**, Functional central limit theorem for a double-indexed summation process, *LMR*, 2005, **45**(3), 401–412 = *LMJ*, 2005, **45**(3), 324–333.
110. **A. Račkauskas** and **D. Zuokas**, Off-line testing for a changed segment in the sample variance, *LMR*, 2005, **45**(2), 241–260 = *LMJ*, 2005, **45**(2), 200–216.
- A. Račkauskas**, see [90].
- M. Radžiūnas**, see [83].
- A. Raguotis**, see [84].

- S. Ragaišis**, see [57].
- S. Ragaišis**, see [58].
- S. Ragaišis**, see [67].
111. **Š. Repšys** and **V. Skakauskas**, Numerical analysis of the age-sex-structured population dynamics taking into account spatial diffusion, *NAMC*, 2005, **10**(4), 365–381.
V. Skakauskas, see [111].
112. **G. Skersys**, On degenerated cyclic codes, *LMJ*, 2005, **45**(spec. issue), 57–59.
E. Stankus, see [59].
113. **G. Stepanauskas** and **J. Šiaulys**, Kubilius-type sequences of additive functions, *LMR*, 2005, **45**(2), 270–281 (in Russian) = *LMJ*, 2005, **45**(2), 225–234.
J. Šiaulys, see [100].
J. Šiaulys, see [113].
J. Turkuvienė, see [68].
J. Turkuvienė, see [69].
R. Vaicekauskas, see [71].
P. Vaitkus, see [65].
S. Zamarys, see [91].
V. Zemlyns, see [109].
114. **P. Vaitkus**, A. Juocevičius, I. Zigmantavičiūtė, and **A. Zaikina**, Mathematical imitation of rehabilitation program and recovering of biosocial functions for patients after SCI, *Health Sciences*, 2005, **15**(4) (in Lithuanian).
115. **P. Vaitkus**, A. Juocevičius, I. Zigmantavičiūtė, and **A. Zaikina**, Application and comparison of linear and nonlinear mathematical models in the rehabilitation, *Health Sciences*, 2005, **15**(4) (in Lithuanian).
A. Zaikina, see [114].
A. Zaikina, see [115].
116. **D. Zuokas**, Testing for a changed segment in variance with application, *LMJ*, 2005, **45**(spec. issue), 385–389.
117. **D. Zuokas**, Detecting and locating a changed segment in a binomial sequence: comparison of tests, *NAMC*, 2005, **10**(20), 171–192.
D. Zuokas, see [110].

Articles: Other journals and proceedings

1. **A. Apynis**, Experience of cooperation between Lithuania's universities and secondary schools, TMRP–2005, 21–23.
2. **V. Bagdonavičius**, **A. Bikėlis**, **V. Kazakevičius**, V. V. Verbas, and A. G. Smirnov, Estimation of tire reliability under covariates, *Proc. XVI Symp. Problems of Tires and Rubber Composites, October 17–21, 2005*, 2005, **1**, Moscow, 2005, 34–41.
3. **R. Baronas**, **F. Ivanauskas**, and J. Kulys, Numerical modelling of biosensors with perforated and selective membranes, *X Intern. Conf. "Mathematical Modeling and Analysis," June 1–5, 2005, Trakai, Lithuania*, 2005, 327–332.

4. **A. Bastys**, J. Blužas, S. Kamiskienė, G. Urbonavičienė, and A. Matiukas, Revealing of coronary artery stenosis and cardiac risk stratification by means of rest ECG, *Folia Cardiologica*, 2005, **12**, suppl. D, 452–454.
A. Bikelis, see [2].
5. **M. Bloznelis** and **A. Čiginas**, On variance minimization for unequal probability sampling, *Proc. Intern. Conf. Survey Sampling Theory and Methodology, June 17–21, 2005, Vilnius University, Lithuania*, 70–75.
6. R. Bortnik and, **J. Šiaulys**, The Gerber–Shiu discounted penalty function for Erlang distributed claims, *ProcFPM*, 2005, **8**, 126–142.
7. **A. Čivilis**, Truck-monitoring and information portals: tracking component, *Proc. Conf. Inform. Technologies 2005*, **2**, 341–346.
8. **V. Dagienė**, Competition in information technology: an informal learning, *Proc. Conf. EUROLOGO 2005, Digital Tools for Lifelong Learning, August 28–31, 2005, Warsaw, Poland*, 228–234.
9. **V. Dagienė**, Curriculum for introducing information technology in Lithuanian primary education: Role of Logo, *Proc. Conf. EUROLOGO 2005, Digital Tools for Lifelong Learning, August 28–31, 2005, Warsaw, Poland*, 211–218.
10. J. Deveikytė, **R. Kudžma**, and L. Tynčenko, Derivative-tangent relation. Experience of the new approach, TMRP–2005, 54–57.
11. J. Dudaitė and **A. Elijio**, Change in basic school students' mathematics achievement through 1995–2003, TMRP–2005, 57–62.
12. **A. Elijio** and J. Dudaitė, Social, economical, and educational factors in relation to mathematics achievement, TMRP–2005, 62–67.
A. Elijio, see [11].
13. V. Garbaliauskienė and **A. Laurinčikas**, Universality theorems for L –functions of elliptic curves, *ProcFPM*, 2005, **8**, 14–25.
F. Ivanauskas, see [3].
14. **A. Juozapavičius** and **E. Kutka**, The model of a transport network and transport database implementation in an information system, *Proc. Conf. Inform. Technologies, 2005*, **2**, 357–361.
15. **J. Karaliūnaitė**, A limit theorem for the function $\zeta_\lambda(s)$, *ProcFPM*, 2005, **8**, 94–103.
16. **P. Kasparaitis**, A. Rudžionis, K. Ratkevičius, and V. Rudžionis, An experience of creating Lithuanian speech-enabled Web applications, *II Baltic Conf. Human Language Technologies, Tallin, April 4–5, 2005*, 2005, 335–340.
17. **R. Kašuba**, Some psychological aspects of solving mathematical problems, TMRP–2005, 90–95 (in Russian).
18. **R. Kašuba**, How the problems connect the mind with psychology?, *Proc. Conf. Mathematics and Mathematics Education–2005, Kaunas Univ. of Technology*, Kaunas, 2005, 19–24 (in Lithuanian).
19. **R. Kašuba**, Aufgaben und psychologische Aspekte ihrer erfolgreichen Lösung, *Proc. Conf. 39. Beiträge zum Mathematikunterricht, Tagung für Didaktik der Mathematik, Bielefeld, Germany*, 2005, 283–286.

V. Kazakevičius, see [2].

20. **R. Kudžma**, Semiotics in education, *Proc. Norma 01, III Nordic Conf. on Mathematics Education, June 8–12, 2001, Kristianstad, Sweden*, 2005, 171–176.
21. **R. Kudžma**, New (old?) approach to differential and integral calculus, TMRP–2005, 100–103.
22. **R. Kudžma**, Inverse function and semiotics, *Proc. V Intern. Conf. Teaching Mathematics: Retrospective and Perspectives, May 7–8, Liepaja, Latvia*, Liepaja, 2005, 175–180.
R. Kudžma, see [10].
E. Kutka, see [14].
23. **A. Laurinčikas**, Limit theorems for the Mellin transforms of the Riemann zeta–function, *ProcFPM*, 2005, **8**, 63–75.
24. **A. Laurinčikas**, Yu. V. Linnik and his large sieve method, *ProcFPM*, 2005, **8**, 76–80.
A. Laurinčikas, see [13].
25. **R. Macaitienė**, Probabilistic discrete limit theorems for general Dirichlet series, *ProcFPM*, 2005, **8**, 94–103.
26. **E. Stankus**, On lectures of the short algebra and geometry course, *Proc. Conf. Mathematics and Mathematics Education–2005, Kaunas Univ. of Technology*, Kaunas, 2005, 16–18 (in Lithuanian).
27. **E. Stankus**, Training of mathematics teachers at Vilnius University, TMRP–2005, 178–181.
28. **A. Svirskas**, M. Wilson, B. Matthews, A. Arenas, D. Mac Randal, J. Gallop, et al., Towards an efficient, reliable and collaborative Web: from distributed computing to semantic description, composition and matchmaking services, *Proc. W3C Workshop on Frameworks for Semantics in Web Services, Innsbruck, Austria, June 9–10, 2005*, <http://www.w3.org/2005/04/FSWS/workshop-report.html>.
29. **A. Svirskas**, B. Matthews, A. Arenas, M. Wilson, D. Mac Randal, J. Gallop, et al., Towards a knowledge grid: requirements for a GridOS to support the next generation Grid, *Proc. COreGRID Workshop on the Next Generation Grid, Mar 16–17, 2005, Brussels, Belgium*, <http://coregrid.cetic.be/NCOSworkshop/agenda/Presentations>.
30. **A. Svirskas** and R. Roberts, Distributed E-business architecture for SME communities: requirements and solutions for request based virtual organisations, *IADIS Intern. Conf. Web Based Communities 2005, IADIS Press, March, Algarve, Portugal*, 2005, 167–177.
J. Šiaulys, see [6].
31. **J. Turkuvienė**, Limiting distributions for random sampling in finite populations, *Workshop Survey Sampling Th. Methodol., Vilnius, June 17–21, 2005*, Vilnius, 160–164.

Submitted for publication in 2005

1. **V. Bagdonavičius, A. Bikelis, and V. Kazakevičius**, M. Nikulin, Non-parametric estimation in degradation–renewal–failure models, *Probability, Statistics and Modelling in Public Health*, New York, 2006, 22–36.
2. **V. Bagdonavičius**, P. Barberger-Gateau, M. Nikulin, and O. Zdorova-Cheminade, The impact of dementia and sex on disablement in the elderly, *Probability, Statistics and Modelling in Public Health*, New York, 2006, 37–52.
3. A. Baltrūnas, **R. Leipus**, and **J. Šiaulys**, Precise large deviation results for the total claim amount under subexponential claim sizes, *Statistics and Probability Letters*.
4. **R. Baronas, F. Ivanauskas**, and J. Kulys, Mathematical and numerical modelling of biosensors based on an array of enzyme microreactors, *Sensors*, bf7, 13 p.
5. **R. Baronas, F. Ivanauskas**, and J. Kulys, Computational modelling behaviour of the potentiometric biosensors, *Sensors and Actuators B: Chemical*.
6. **R. Baronas**, J. Kulys, and **F. Ivanauskas**, Computational modelling of biosensors with perforated and selective membranes, *J. Math. Chemistry*, 14 p., to appear.
A. Bikelis, see [1].
7. **A. Dubickas**, Even and odd integral powers of a real number blasgur, *Math. J.*, to appear.
8. **A. Dubickas**, On the limit points of the fractional parts of powers of Risof numbers, *Archivum. Math.*, to appear
9. **A. Dubickas**, On the distance from a rational paver to the nearest integer, *J. Number Th.*, to appear.
10. **A. Dubickas**, On the discriminant of the paver of an algebraic number, *Studia Sci. Math. Hungarica*, to appear.
11. **A. Dubickas**, Additive Hilberts theorem 90 in the ring of algebraic integers, *Fundationes Mathematical*, to appear.
12. **A. Dubickas**, Arithmetical properties of linear recurrent sequences, *J. Number Th.*, to appear.
13. **A. Elijo**, The impact of PIRLS in Lithuania, In: *The Impact of PIRLS 2001 in a Number of Countries*, Ed. K. Schwippert.
14. **R. Garunkštis** and J. Steuding. On the distribution of zeros of the Hurwitz zeta-function, *Math. Comput.*, to appear.
15. **F. Ivanauskas**, A. Katelnikovas, J. Barkauskas, A. Beganskiene, and A. Kareiva, Aqueous sol-gel synthesis route for the preparation of YAG: Evaluation of sol-gel process by mathematical regression model, *J. Sol-Gel Science and Technology*.
16. **F. Ivanauskas**, A. Kareiva, and **B. Lapcun**, Diffusion and reaction rates of the yttrium aluminium garnet synthesis using different techniques, *J. Math. Chemistry*
F. Ivanauskas, see [4].
F. Ivanauskas, see [5].
F. Ivanauskas, see [6].

17. A. Jucevičius, I. Zigmantavičiūtė, **A. Zaikina**, and **P. Vaitkus**, Mathematical imitation of rehabilitation program and recovering of biosocial functions for patients after SCI, *Health Sciences*, 2005, **15**(4), to appear.
18. A. Jucevičius, I. Zigmantavičiūtė, **A. Zaikina**, and **P. Vaitkus**, Application and comparison of linear and nonlinear mathematical models in the rehabilitation, *Health Sciences*, 2005, **15**(4), to appear.
19. **M. Juodis** and **A. Račkauskas**, A self-normalization for weakly dependent linear processes, *Stat. Probab. Letters*.
20. **A. Juozapavičius** and A. Baranovskis, Dynamic vehicle routing problem and location-based services in mobile environment, *Informatica*.
21. **K. Karčiauskas**, Guided subdivision, *Computer Aided Geometric Design*.
V. Kazakevičius, see [1].
22. **R. Krasauskas**, Bezier patches on almost toric surfaces, *Algebraic Geometry and Geometric Modeling*.
B. Lapcun, see [16].
23. **A. Laurinčikas**, Limit theorems for the Mellin transform of the square of the Riemann zeta-function, *Acta Arith.*, to appear.
24. **A. Laurinčikas**, J. Kaczorowski, J. Steuding, On the value distribution of shifts of universal Dirichlet series, *Monatsh. Math.*, to appear.
25. **A. Laurinčikas**, J. Steuding, On the Lindelöf hypothesis, *Integrals Transforms and Special Functions*, to appear.
26. **A. Laurinčikas**, The joint distribution of the Riemann zeta-function, *Bull. Australian Math. Soc.*, to appear.
27. **A. Laurinčikas**, S. Kanemitsu, L. Ding, On the summatory function of a class of multiplicative functions, *Lith. Math. J.*, to appear.
28. **R. Leipus**, **V. Paulauskas**, and **D. Surgailis**, Random coefficient AR(1) process with heavy-tailed renewal-switching coefficients and heavy-tailed noise, *J. Appl. Probab.*
29. **R. Leipus** and **D. Surgailis**, Long-range dependence in ON/OFF process with application to $G/G/1/0$ queue, *J. Appl. Probab.*
30. **R. Leipus** and L. Horváth, Effect of aggregation on estimators in AR(1) sequence, *J. Time Series Analysis*.
R. Leipus, see [3].
31. **V. Mackevičius**, On simulation of diffusion on an interval, *Mathematics and Computers in Simulation*.
32. **E. Manstavičius**, On analytic method in probabilistic combinatorics, *Osaka J. Math.*, submitted.
33. **V. Paulauskas**, On unit root for multiindexed autoregression models, *J. Multiv. Analysis*.
V. Paulauskas, see [28].
34. **Š. Raudys** and I. Žliobaitė, The multi-agent system for prediction of financial time series, *Lect. Notes Comp. Sc.*

35. **A. Svirskas** and R. Roberts, Towards architecture of managed dynamic virtual organisations for E-business communities, *Intern. J. Web Based Communities*, 2(2), to appear, <http://www.inderscience.com/browse/index.php?journalID=50>.
36. **A. Svirskas**, I. Ignatiadis, B. Roberts, and K. Tarabanis, Promoting trust in B2B virtual organizations through business and technological infrastructures, *Intern. J. Networking and Virtual Organizations*, to appear, <http://www.inderscience.com/browse/index.php?journalID=22>.
- D. Surgailis**, see [28].
- D. Surgailis**, see [29].
- J. Šiaulys**, see [3].
- P. Vaitkus**, see [17].
- P. Vaitkus**, see [18].
- A. Zaikina**, see [17].
- A. Zaikina**, see [18].
37. **S. Zubė**, A circle representation using complex and quaternion numbers, *LMR*, 12 p.

Preprints and Technical Reports

1. A. Baltrūnas, **R. Leipus**, and **J. Šiaulys**, Precise large deviation results for the total claim amount under subexponential claim sizes, *Vilnius Univ. Preprint 05–25*.
2. **M. Bloznelis**, Degree variance is asymptotically normal, *Vilnius Univ. Preprint 05–2*.
3. **M. Bloznelis** and **A. Čiginas**, On Variance minimization for unequal probability sampling, *Vilnius Univ. Preprint 05–11*.
4. **M. Bloznelis**, Bootstrap approximation to distributions of finite population U -statistics. *Vilnius Univ. Preprint 05–24*.
A. Čiginas, see [3].
5. Y. Davydov and **V. Paulauskas**, On estimation of parameters for spatial autoregression model, *Vilnius Univ. Preprint 05–31*.
6. **A. Dubickas**, Divisibility properties of certain recurrent sequences, *Vilnius Univ. Preprint 05–4*.
7. **A. Dubickas**, Additive Hilbert's Theorem 90 in the ring of algebraic integers, *Vilnius Univ. Preprint 05–5*.
8. **A. Dubickas**, Two exercises concerning the degree of the product of algebraic numbers, *Vilnius Univ. Preprint 05–7*.
9. **A. Dubickas**, On the discriminant of the power of algebraic number, *Vilnius Univ. Preprint 05–10*.
10. **A. Dubickas**, There are infinitely many limit points of the fractional parts of powers, *Vilnius Univ. Preprint 05–12*.
11. **A. Dubickas**, On the distance from a rational power to the nearest integer, *Vilnius Univ. Preprint 05–13*.
12. **A. Dubickas**, On the limit points of the fractional parts of powers of Pisot numbers, *Vilnius Univ. Preprint 05–21*.

13. **V. Garbaliauskienė**, J. Genys, and **A. Laurinčikas**, The discrete universality of L -functions of elliptic curves, *Vilnius Univ. Preprint 05–26*.
14. **R. Garunkštis**, Growth of the Lerch zeta-function, *Vilnius Univ. Preprint 05–3*.
15. **R. Garunkštis** and J. Steuding, Simple zeros and discrete moments of the derivative of the Riemann zeta-function, *Vilnius Univ. Preprint 05–6*.
16. **R. Garunkštis** and J. Steuding, On the distribution of zeros of the Hurwitz zeta-function, *Vilnius Univ. Preprint 05–20*.
17. **B. Grigelionis**, Limit theorems for record values using power normalization, *MII Preprint 2005–34*.
18. **R. Ivanauskaitė** and **A. Laurinčikas**, The lognormal distribution law for zeta-functions of certain cusp forms, *Vilnius Univ. Preprint 05–19*.
19. **A. Laurinčikas**, The joint distribution of the Riemann zeta-function, *Vilnius Univ. Preprint 05–16*.
20. **A. Laurinčikas**, A limit theorem for the Hurwitz zeta-function with algebraic irrational parameter, *Vilnius Univ. Preprint 05–17*.
21. **A. Laurinčikas**, On the Lindelöf hypothesis for the Hurwitz zeta-function, *Vilnius Univ. Preprint 05–18*.
22. **A. Laurinčikas**, Value distribution of general Dirichlet series. VI, *Vilnius Univ. Preprint 05–27*.
23. **A. Laurinčikas**, Limit theorems for the Estermann zeta-function. II, *Vilnius Univ. Preprint 05–28*.
24. **A. Laurinčikas**, On the derivatives of zeta-functions of certain cusp forms. II, *Vilnius Univ. Preprint 05–29*.
25. **A. Laurinčikas**, Limit theorems for the Mellin transform of $|\zeta(1/2 + it)|^4$, *Vilnius Univ. Preprint 05–30*.
A. Laurinčikas, see [13].
A. Laurinčikas, see [18].
26. **R. Leipus** and L. Horvath, Effect of aggregation on estimators in $AR(1)$ sequence, *Vilnius Univ. Preprint 05–33*.
27. **R. Leipus** and **D. Surgailis**, Long-range dependence in ON/OFF process with application to $G/G/1/0$ queue, *Vilnius Univ. Preprint 05–32*.
R. Leipus, see [1].
28. **R. Macaitienė**, Joint discrete limit theorems in the space of analytic functions for general Dirichlet series, *Vilnius Univ. Preprint 05–1*.
29. **R. Macaitienė**, A joint discrete limit theorem in the space of meromorphic functions for general Dirichlet series, *Vilnius Univ. Preprint 05–9*.
30. **R. Macaitienė**, A discrete universality theorem for general Dirichlet series, *Vilnius Univ. Preprint 05–15*.
31. **A. Mačiulis** and **J. Šiaulys**, On the local distance between arithmetical distributions, *Vilnius Univ. Preprint 05–14*.
32. **E. Manstavičius**, An analytic method in probabilistic combinatorics, *Vilnius Univ. Preprint 05–23*.

- V. Paulauskas**, see [5].
33. **G. Stepanauskas** and **J. Šiaulys**, The sequences of additive functions of the Kubilius type, *Vilnius Univ. Preprint 05–8*.
 34. **G. Stepanauskas** and **J. Šiaulys**, On mean value of the product of multiplicative functions with shifted argument, *Vilnius Univ. Preprint 05–22*.
- D. Surgailis**, see [27].
- J. Šiaulys**, see [31].
- J. Šiaulys**, see [33].
- J. Šiaulys**, see [34].

Conference reports in 2005

XLVI Conference of Lithuanian Mathematical Society, June 15–16, 2005, Vilnius University, Vilnius.

1. **A. Apynis** and **E. Stankus**, School mathematics and university studies.
2. **J. Artamonova**, Bond market modeling.
3. R. Bakanas, **F. Ivanauskas**, and **A. Raguotis**, Computer modeling of driving front in bistable systems.
4. A. Baltrūnas and **J. Šiaulys**, Asymptotics of the second order for subordinated sequences when the subordinator has a heavy tail.
5. **G. Bareikis**, Arithmetical functions in the polynomial semigroup.
6. **R. Baronas**, **F. Ivanauskas**, **P. Vaitkus**, and **A. Zaikina**, Piecewise linear approximation of response curve.
7. **R. Baronas**, **F. Ivanauskas**, **R. Maslovskis**, and **P. Vaitkus**, Application of the total principal components for compound concentration classification.
8. **M. Bloznelis**, Limit theorems for parameters of a random graph.
9. **V. Čekanavičius**, Estimates for centered Poisson approximation.
10. **J. Dabulytė-Bagdonavičienė**, **F. Ivanauskas**, and A. Survila, Comparison of two electrochemical problems.
11. **V. Dagienė**, **R. Laucius**, Designing a localization course.
12. **A. Dubickas**, Additive Hilbert's Theorem 90.
13. **A. Dubickas** and **A. Novikas**, Arithmetic properties of powers of rational numbers.
14. **R. Eidukevičius**, D. Characiejus, and R. Janavičius, Estimation of cell cycle phases durations.
15. **A. Elijio**, Lower bound estimates for weighted sums.
16. **A. Elijio** and **G. Murauskas**, Structural analysis of reading achievement of school students.
17. **K. Gadeikis**, On the change-point problem for tail index.
18. L. Giraitis, **R. Leipus**, and **D. Surgailis**, Long-range dependent time series.

19. **R. Ivanauskaitė**, Logarithmic derivative of zeta-functions of certain cusp forms.
20. **F. Ivanauskas, R. Lapinskas**, and M. Žalakevičius, First spring arrival response to climate warming in birds.
21. **F. Ivanauskas** and M. Puida, Light beam phase retrieval in nonlinear media: a computer simulation.
22. **F. Ivanauskas, P. Katauskis**, and **V. Skakauskas**, Modeling wave propagation systems.
23. **F. Ivanauskas**, Solution and applications of reaction-diffusion equations.
24. **H. Jasiūnas** and **V. Verikaitė**, Theses of Lithuanian mathematicians and informatics 1930–2005.
25. **A. Javtokas**, Geometric zeta-functions.
26. A. Juocevičius, **P. Vaitkus**, and **A. Zaikina**, Prediction of the Barthel, ADL, FIM indices.
27. **M. Juodis**, Empirical central limit theorem for weakly dependent variables.
28. **I. Kaunietis**, Computer simulation of steady-state currents at electrodes.
29. **A. Kavaliauskas**, Qualitative analysis of a tumor growth model.
30. B. Kryžienė and **G. Misevičius**, Large durations of endomorphisms of a two-dimensional torus. II.
31. **J. Kruopis** and **R. Levulienė**, Classification of kineskopes using methods of mathematical statistics.
32. **J. Kubilius**, Professor Zigmantas Žemaitis is 120.
33. **J. Kubilius**, Some classical formulae.
34. **R. Kudžma**, Functions' graphs and slopes of lines.
35. Z. Lukšienė and **G. Misevičius**, Simulation of kinetics for total destruction.
36. **R. Macaitienė**, Discrete value distribution of general Dirichlet series.
37. **V. Mackevičius**, How to simulate correctly a diffusion on an interval?
38. **A. Mačiulis** and **J. Šiaulys**, On the distance between distributions of additive functions.
39. **V. Maniušis**, Convergence of empirical characteristic function and applications.
40. **G. Misevičius** and A. Pincevičius, A stochastic model for an assault.
41. **K. Navickis**, Osculating paraboloid.
42. **K. Navickis**, Geometry of two-parametric family of linear line complexes.
43. **J. Norkūnienė**, The law of iterated logarithm for additive semigroups.
44. **V. Paulauskas**, On the estimators of parameters of autoregression fields.
45. **V. Paulauskas**, Mathematical model of Lithuanian macroeconomic.
46. **G. Purėškis**, On the estimation of the explosion moment of the solution to a Schrödinger-type system.
47. **A. Račkauskas**, Investigation of a functional regression model.
48. **Š. Repšys** and **V. Skakauskas**, Modeling population dynamics with a complex structure.

49. **V. Skakauskas** and O. Štikoniene, Stability analysis of a population dynamics model.
50. **V. Skakauskas**, On the population dynamics with the complex structure.
51. **V. Stakėnas**, Number-theoretic inequalities.
52. **G. Stepanauskas** and **J. Šiaulys**, On the correlation of multiplicative functions.
53. **D. Sūdžiūtė**, Peculiarities of application of the simplex method to the bimatrix game.
54. **S. Zamarys**, Moments of Dirichlet L -functions.
55. **V. Zemlys**, Functional limit theorem for multiindexed summation process.
56. **D. Zuokas**, Detection of changed segment in variance for independent sample.

Other conference reports

Abbreviations:

- TMRP–2005 *VI International Conference Teaching Mathematics: Retrospective and Perspectives, May 13–14, 2005, Vilnius University, Lithuania.*
- Trakai–2005 *X International Conference “Mathematical Modeling and Analysis,” 2005, June 1–5, Trakai, Lithuania.*

1. **A. Apynis**, On the role and influence of the School of Young Mathematicians in Lithuania, *Intern. Conf. Methodology and Technology of Education in the 21st Century: Mathematics, Informatics, Physics, November 17–18, 2005, Minsk.*
2. **A. Apynis**, Experience of cooperation between Lithuania’s universities and secondary schools, TMRP–2005, Abstracts, 11–12.
3. **V. Bagdonavičius**, **A. Bikėlis**, **V. Kazakevičius**, and M. Nikulin, Estimation in degradation models with partial renewals, *Intern. Symp. Stochastic Models in Reliability, Safety, Security and Logistics, February 15–17, 2005, Beer Sheva*, Abstracts, 2005, p. 26.
4. **V. Bagdonavičius** and M. Nikulin, On goodness-of-fit for homogeneity and for survival regression models, *Intern. Symp. Business and Industrial Statistics, April 13–16, 2005, Palm Cove, Australia.*
5. **V. Bagdonavičius** and M. Nikulin, Aging and degradation models in reliability, safety and health sciences, *Intern. Symp. Stochastic Models in Reliability, Safety, Security and Logistics, February 15–17, 2005, Beer Sheva*, Abstracts, 2005, p. 27.
6. **R. Baronas**, **F. Ivanauskas**, and J. Kulys, Mathematical and numerical modelling of biosensors based on an array of enzyme microreactors, *III Intern. Symp. Sensor Science, July 18–21, 2005, Juelich, Germany*, Abstracts, 170–171.
7. **R. Baronas**, J. Kulys, and **F. Ivanauskas**, Modelling catalytical biosensors, Trakai–2005, Abstracts, p. 61.
8. **A. Bastys**, J. Blužas, S. Kamiskienė, G. Urbonavičienė, and A. Matiukas, Revealing of coronary artery stenosis and cardiac risk stratification by means of rest ECG, *XI Congr. Intern. Soc. Holter and Noninvasive Electrocadiology, XXXII Congr. Intern. Soc. Electrocadiology, June 2–4, 2005, Gdańsk, Poland*, p. 92.

9. **M. Bloznelis**, Second order correct resampling approximations to the distribution function of a finite population statistics, *Workshop Limit Theorems and Characterization Problems in Statistics and Probability, December 5–7, 2005, Bielefeld University, Germany*.
10. **V. Čyras**, On formalisation of the goal concept in law, *Symp. Recent Developments in Artificial Intelligence Methods, November 16–18, 2005, Gliwice, Abstracts*, 71–75.
11. **J. Dabulytė** and **F. Ivanauskas**, Numerical investigations of thermal effects in ND: YAG, Trakai, Abstracts, p. 28.
12. **V. Dagienė**, Competition in information technology: an informal learning, *Conf. EU-ROLOGO 2005, Digital Tools for Lifelong Learning, August 28–31, 2005, Warsaw, Poland*.
13. **V. Dagienė**, Curriculum for introducing information technology in Lithuanian primary education: role of Logo, *Conf. EU-ROLOGO 2005, Digital Tools for Lifelong Learning, August 28–31, 2005, Warsaw, Poland*.
14. **S. Dapkūnas**, Software measurement: theory and practice, *Proc. Conf. Information Technologies, Kaunas Univ. of Technology, 2005*, Technologija, 2005, 386–390 (in Lithuanian).
15. J. Deveikytė, **R. Kudžma**, and L. Tynčenko, Derivative-tangent relation. Experience of the new approach, TMRP–2005, Abstracts, 45–46.
16. **A. Dubickas**, Arithmetical properties of rational powers, *Intern. Conf. Analytic Methods in Number Theory, Probability Theory and Mathematical Statistics, April 25–29, 2005, St. Petersburg, Russia*, Abstracts, 2005, p. 16.
17. **A. Dubickas**, On the fractional parts of powers of an algebraic number, *XVII Czech and Slovak Intern. Conf. Number Theory, September 5–10, 2005, Malenovice, Czech Republic*, Abstracts, p. 32.
18. **A. Dubickas**, Additive Hilbert's Theorem 90 for algebraic integers, *V Intern. Algebraic Conf., July 20–27, 2005, Odessa, Ukraine*, Abstracts, 66–67.
19. J. Dudaitė and **A. Elijio**, Change in basic school students' mathematics achievement through 1995–2003, TMRP–2005, Abstracts, ap. 57.
20. **A. Elijio** and J. Dudaitė, Social, economical, and educational factors in relation to mathematics achievement, TMRP–2005, Abstracts, p. 62.
21. **A. Elijio**, Social, economical, and educational factors in developing reading literacy, *European Conf. Educational Research “Education and Knowledge Economics,” September 7–10, 2005, Dublin, Ireland*.
22. **R. Garunkštis**, Growth and value distribution of some zeta-functions, *Intern. Conf. Probability and Number Theory 2005 (P&NT 05), June 20–24, Kanazawa, Japan*, Abstracts, p. 18.
23. **R. Garunkštis**, The Hurwitz zeta-function. Dependence on the parameter, *Limit Theorems and Zeta Functions. A special Week at Nagoya, June 13–17, 2005, Japan*.
24. **R. Garunkštis**, Effective universality, *Colloq. Value Distribution of Dirichlet Series, 30 years to Voronin's Universality Theorem, Universidad Autonóma de Madrid, December 5–9, 2005*.

25. **R. Ivanauskaitė**, Limit theorems for the modulus of the argument of zeta-functions of certain cusp forms, *V Intern. Algebraic Conf., July 20–27, 2005, Odessa, Ukraine*, Abstracts, 89–90.
26. **F. Ivanauskas, I. Kaunietis**, V. Laurinavičius, and R. Šimkus, Modelling of enzyme doped carbon paste electrodes, Trakai–2005, Abstracts, p. 138.
27. **F. Ivanauskas**, A. Kareiva, and **B. Lapcun**, Synthesis of YAG, Trakai–2005, Abstracts, p. 67.
28. **F. Ivanauskas, R. Baronas**, and J. Kulys, Numerical modelling of biosensors with perforated and selective membranes, Trakai–2005, Abstracts, p. 13.
29. **F. Ivanauskas** and **T. Meškauskas**, On the two-step numerical algorithms for derivative nonlinear Schrödinger equation, *Intern. Conf. Selected Problems of Modern Mathematics dedicated to the 200th Anniversary of K. G. Jacobi, and the 750th Anniversary of the Koenigsberg foundation, April 4–8, 2005, Kaliningrad State University, Russia*, Abstracts, 178–180.
30. **F. Ivanauskas, V. Skakauskas**, and **P. Katauskis**, On the short wave propagation in a medium composed of orthotropic crystals, *X Jubilee Nat. Congr. Theoretical and Applied Mechanics, September 13–16, 2005, Varna*, Abstracts, p. 63.
31. **F. Ivanauskas, P. Katauskis**, and **V. Skakauskas**, Modelling of an elastic anisotropic structure, Trakai–2005, Abstracts, p. 51.
32. **F. Ivanauskas**, M. Žalakevičius, **R. Lapinskas**, A. Bukantis, and V. Nedzinskas, The impact of global warming on first spring arrival of short-, middle- and long-distance migrants: a case study in Eastern Baltic region, *Conf. Meteorology and Hydrology in Lithuania: Evolution and Perspectives*, March 23, 2005, Vilnius, Abstracts, p. 41.
33. **H. Jasiūnas** and **V. Verikaitė**, Lithuanian Mathematical Research Schools, *XIII World Lithuanian Symposium on the Arts and Sciences, Vilnius, 2005 m. June 30–July 4*, Abstracts, p. 224.
34. **R. Kašuba**, How to meet problems: some psychological steps, TMRP–2005, Abstracts, 41–42.
35. B. Kaulakys, M. Alaburda, V. Gontis, **T. Meškauskas**, and J. Ruseckas, Modeling of flows with the power-law spectral densities and power-law distributions of flows intensities, *Conf. Traffic and Granular Flow'05, October 10–12, 2005, Berlin, Germany*, Abstracts, p. 15.
36. **K. Karčiauskas**, Guided subdivision, *SIAM Conf. Geometric Design and Computing, Phoenix, USA, October 31–November 3*.
37. **K. Karčiauskas**, Guided C2 patch flow, *Intern. Conf. Industry Challenges in Geometric Modeling and CAD, March 10–11, 2005, Darmstadt, Germany*.
38. **R. Krasauskas**, Applications of toric surfaces in geometric modeling, *Intern. Conf. Topology, Analysis and Applications to Mathematical Physics, February 14–18, 2005, Moscow, Russia*.
39. **R. Krasauskas**, Bezier patches on canal surfaces, *SIAM Conf. Geometric Design and Computing, October 31–November 3, 2005, Phoenix, USA*.

40. **R. Krasauskas.** Brasil, Angra dos Reis, 2nd Latin American School and Workshop on Polynomial Systems. Talk *Applications of toric varieties to rational surface modeling*. February 28–March 4.
41. **R. Krasauskas.** Norway, Oslo, Workshop *Computational Methods for Algebraic Spline Surfaces II*. Talk *Rational canal surfaces*. September 13–17.
42. **R. Kudžma,** New (old?) approach to differential and integral calculus, TMRP–2005, Abstracts, 44–45.
43. **R. Kudžma,** Algebra-geometry relation in teaching functions and Calculus, *Norma 05, Fourth Nordic Conf. on Mathematics Education, September 2–6, 2005, Trondheim, Norway*.
44. **K. Lapin,** Survey of direct manipulation interfaces, *Proc. Conf. Information Technologies, Kaunas Univ. of Technology, 2005*, 779–785 (in Lithuanian)
45. **R. Laucius,** Free Pascal application possibilities, TMRP–2005, Abstracts, p. 47.
46. **A. Laurinčikas,** Limit theorems for the Hurwitz zeta-function with algebraic irrational parameter, *Intern. Conf. Analytic Methods in Number Theory, Probability Theory and Mathematical Statistics, April 25–29, 2005, St. Petersburg, Russia*, Abstracts, 26–28.
47. **A. Laurinčikas,** The joint distribution of arithmetic functions, *XVII Czech and Slovak Intern. Conf. Number Theory, September 5–10, 2005, Malenovice, Czech Republic*, Abstracts, p. 37.
48. **A. Laurinčikas,** Value distribution of the Riemann zeta-function, *V Intern. Algebraic Conf., July 20–27, 2005, Odessa, Ukraine*, Abstracts, 122–123.
49. **A. Laurinčikas,** Limit theorems for the Mellin transforms of the Riemann zeta-function, *Intern. Conf. Probability and Number Theory 2005 (P&NT 05), June 20–24, Kanazawa, Japan*, Abstracts, 25–26.
50. **A. Laurinčikas,** The joint distribution of the Riemann zeta-function, *Limit Theorems and Zeta-Functions. A Special Week at Nagoya, June 13–17, 2005, Japan*.
51. **A. Laurinčikas,** Prehistory of the Voronoi universality theorem, *Colloq. Value Distribution of Dirichlet Series, 30 years to Voronin’s Universality Theorem, Universidad Autonoma de Madrid, December 5–9, 2005*.
52. **A. Laurinčikas,** The joint universality of periodic Hurwitz zeta-functions, ibidem.
53. **R. Macaitienė,** Probabilistic discrete limit theorems for general Dirichlet series, *V Intern. Algebraic Conf., July 20–27, 2005, Odessa, Ukraine*, Abstracts, 131–132.
54. **E. Manstavičius,** Discrete limit laws for additive functions on the symmetric group, *XVII Czech and Slovak Intern. Conf. Number Theory, September 5–10, 2005, Malenovice, Czech Republic*, Abstracts, p. 39.
55. **E. Manstavičius,** Analytic number theory in the symmetric group, *V Intern. Algebraic Conf., July 20–27, 2005, Odessa, Ukraine*, Abstracts, 132–133.
56. **E. Manstavičius,** Influence of probabilistic number theory to combinatorics, *Intern. Conf. Probability and Number Theory 2005 (P&NT 05), June 20–24, Kanazawa, Japan*, Abstracts, 28–29.

57. **E. Manstavičius**, Functional limit theorems on random permutations, *Limit Theorems and Zeta Functions. A Special Week at Nagoya, June 13–17, 2005, Japan.*
58. **J. Norkūnienė**, The law of iterated logarithm for combinatorial selections, *V Intern. Algebraic Conf., July 20–27, 2005, Odessa, Ukraine, Abstracts*, p. 143.
59. **V. Paulauskas**, On some relations between probability and operator theory, *Intern. Conf. Modern Problems and New Trends in Probab. Theory*, June 19–26, 2005, Chernovitsi, Ukraine.
60. **V. Paulauskas**, On the growth of variance of multiindexed autoregression process with unit root, *Intern. Conf. Analytic Methods in Number Theory, Probability and Statistics, April 25–29, 2005, Petersburg, Russia.*
61. **V. Paulauskas**, On some optimal error estimates in operator-norm approximation of semigroups, *Intern. Conf. Operator Semigroups. Evolution, Equations and Spectral Theory in Math. Physics, October 3–7, 2005, Lumini-Marseille, France.*
62. **V. Paulauskas**, Rates of convergence for sums of linear processes, *Workshop Limit Theorems and Characterization Problems in Statistics and Probability, December 5–7, 2005, Bielefeld, Germany.*
63. **Š. Repšys** and **V. Skakauskas**, Modelling of population dynamics with maternal care, Trakai–2005, Abstracts, p. 105.
64. **V. Skakauskas**, On the population dynamics with a discrete set of offsprings and child care, Trakai–2005, Abstracts, p. 123.
65. **V. Skakauskas**, A one-sex population dynamics model with a discrete set of offsprings and child care, *Intern. Workshop Diff. Equations in Math. Biology, July 11–13, 2005, Le Havre, France*, Anstracts, p. 49.
66. **V. Skakauskas**, On the population dynamics with child care, *European Conf. Math. Theoret. Biology, July 18–22, 2005, Dresden, Germany*, Abstracts, 2, p. 95.
67. **V. Skakauskas**, **F. Ivanauskas**, and **P. Katauskis**, On the short wave propagation in a medium composed of orthotropic crystals, *X Jubilee Workshop Transport Phenomena in Two-Phase Flow and V Jubilee Symp. South East European Countries (SEEC), September 10–15, 2005, Sunny Beach Resort, Bulgaria.*
68. **E. Stankus**, Training of mathematics teachers at Vilnius University, TMRP–2005, Abstracts p. 75.
69. **E. Stankus**, About lectures of the short course on algebra and geometry, *Proc. Conf. Mathematics and Mathematics Education-2005, Kaunas Univ. of Technology.*
70. **G. Stepanauskas**, The method of characteristic functions in probabilistic number theory, *II Intern. Conf. Applied Mathematics, August 12–18, 2005, Plodiv, Bulgaria*, Abstracts, p. 259.
71. **J. Šiaulys**, The factorial moments method in probabilistic number theory, *ibidem*, 2, p. 252.
72. A. Vaišvila, **V. Bagdonavičius**, and **J. Kruopis**, Classification of kinescopes for quality and reliability improvement, *Proc. Intern. Symp. Business and Industrial Statistics, April 13–16, 2005, Palm Cove, Australia.*

73. **S. Zubė**, Using envelopes of quadratic families of spheres for blending natural quadrics, *Intern. Conf. MEGA 2005 (Effective Methods of Algebraic Geometry)*, Sardinia, Italy.

Books, textbooks, lecture notes (in Lithuanian)

1. **A. Apynis**, Game Theory, 120 p., submitted.
2. **A. Apynis**, Methods of Optimization, 200 p., submitted.
3. **G. Bareikis**, Introduction in Discrete Mathematics (texbook), Vilnius, 2005, 144 p.
<http://www.mif.vu.lt/katedros/matinf/asm/bg/bg.html>.
4. **R. Baronas**, Database Management Systems, *TEV*, Vilnius, 2005, 184 p.
5. L. Beghi and **R. Eidukevičius**, Statistics and Computers (in Italian and English), Imprimitur, Padova , Italy, 2005, 145 p.
6. **M. Bloznelis**, Lecture Notes on Probability Theory, 2005, 119 p., submitted.
7. **V. Čyras**, Artifical Intelligence, 2005.
<http://www.mif.vu.lt/katedros/se/veikla/konspektai-DI-Cyras.zip>.
8. **V. Diciūnas**, Foundations of Algorithm Analysis (Lecture notes), 2005, 106 p.
http://www.mif.vu.lt/katedros/cs/Asmen/algoritmu_analize.pdf.
9. **A. Dubickas**, XIX Lithuanian Team Olympiads in Mathematics, *Vilnius University Press*, Vilnius, 2005, 15 p.
10. **E. Gaigalas**, Algebra and Geometry, 2005.
<http://www.mif.vu.lt/katedros/mmk/gaig./files/algebra1.html>.
11. **R. Grigutis**, Algorithms in Algebra and Number Theory, 2005.
<http://www.mif.vu.lt/katedros/matinf/asm/gr/asta.htm>.
12. **R. Kašuba**, Psychological Aspects of Mathematical Problem Solving, 2005, 85 p., submitted.
13. **P. Kasparaitis**, Practical Informatics, 2005.
<http://www.mif.vu.lt/~pijus/PJ/Praktlnf.pdf>.
14. **A. Kavaliauskas**, Collection of Mathematical Exercises: Indefinite Integral, Function of Several Variables, Ordinary Differential Equations, Multiple integrals, Number series, *Vilnius University Press*, 2005, 59 p.
15. **V. Kazakevičius**, Analysis of Qualitative Data, 2005, 70 p.
<http://www.mif.vu.lt/~vytas/kokybin/kokyb.pdf>.
16. **V. Kiško**, Computer Architecture (Labaroatory guide), 2005, 117 p.
<http://www.mif.vu.lt/~viktor/asm/2005/metpriel.pdf>.
17. **R. Kudžma**, Mathematical Analysis Problems of Control Works and Exams 2001–2003, 2005, 93 p., submitted.
18. **K. Lapin**, Programming in Pascal and C, Vol. 1–2, 2005.
http://www.mif.vu.lt/~moroz/infKonspektai/Prog_I.pdf,
http://www.mif.vu.lt/~moroz/infKonspektai/Prog_II.pdf.
19. **R. Levulienė**, Statistics Using SAS, Part 1, 2005, 185 p. <http://www.mif.vu.lt/~ratal72>.

20. **V. Mackevičius**, Stochastic Analysis, *Vilnius University Press*, 2005, 198 p.
21. **A. Maldeikienė**, Learn To Count Your Money, *Tyto Alba*, Vilnius, 2005, 388 p.
22. **A. Maldeikienė**, Macroeconomics (Lecture notes), 2005.
<http://www.mif.vu.lt/~ausra>.
23. **S. Narkevičius**, Object-oriented Programming with C++, 2005.
<http://www.mif.vu.lt/~saulukas>.
24. **G. Skersys** Theory of Error-Correcting Codes (Lecture notes), 2005, 56 p.
<http://www.mif.vu.lt/katedros/cs/Asmen/KodavimoTeorija.pdf>.
25. **V. Stakėnas**, Stories of Ciphers, *TEV*, Vilnius, 2005, 128 p.
26. **E. Stankus**, Linear Algebra and Geometry, 2005.
<http://www.mif.vu.lt/katedros/mmk/stan./files/alg.htm>.

Other publications (in Lithuanian)

1. **A. Apynis**, Systems of Linear Equations, In: *For a Young Mathematician. VI: Problems and Solutions of Lithuanian School of Young Mathematicians 2003–2005*, *Danielius*, Vilnius, 2005, 42–51.
2. **V. Bagdonavičius**, A. Kačerauskienė, and V. Kazilionytė, *Academician Bronius Grigelionis*, *Danielius*, Pasvalys, 2005, 175 p.
3. **V. Čekanavičius** and **A. Elijio**, Analysis of the Results of Progress in International Reading Literacy Study PIRLS 2001 *National Egzamination Centre*, Vilnius, 2005, 35 p.
A. Elijio, see [3].
4. **H. Jasiūnas** and **V. Verikaitė**, *The councils of the faculties of Vilnius University in which mathematicians defended their theses for scientific degrees in 1948–1990*.
<http://www.mif.vu.lt/matinf/savadas/tarybos.htm>.
5. **H. Jasiūnas**, Feliksas Ivanauskas: Features of Life and Activities, *Faculty of Mathematics and Informatics of Vilnius University*, 58 p.
6. **R. Kašuba**, Seeking Wonderful Ideas, *Kompiuterija*, 2005, **3**, p. 48.
7. **R. Kašuba**, About Sherlock Holmes and two Chocolate Experts from Lithuania, *Kompiuterija*, 2005, **6**, 48–49.
8. **R. Kašuba**, Gymnastics of Mind, *Kompiuterija*, 2005, **7**, 48–49.
9. **R. Kašuba**, Magic of Problems, *Kompiuterija*, 2005, **8**, 46–47.
10. **R. Kašuba**, Considerations and Weighings, *Kompiuterija*, 2005, **9**, 46–47.
11. **R. Kašuba**, When Basketball Passions are Away, *Kompiuterija*, 2005, **10**, p. 46.
12. **R. Kašuba**, Not Included in a Textbook, *Kompiuterija*, 2005, **12**, p. 49.
13. **J. Kubilius**, Section of Mathematics, In: *Lietuvos mokslų akademijos veikla 2004* (*Activities of Lithuanian Academy of Sciences*), Vilnius, 2005, 42–44).
14. **J. Kubilius**, We will miss him for a long time, In: *The Fate of a Pedestrian Knight. The Time and Personality of Česlovas Kudaba*, 2nd suppl. ed., *Santara*, Kaunas, 2005, 252–256.

15. **V. Stakėnas**, Pascal's Triangle, In: *For a Young Mathematician. VI: Problems and Solutions of Lithuanian School of Young Mathematicians 2003–2005*, Danielius, Vilnius, 2005, 35–41.
16. **V. Verikaitė**, Henrikas Jasiūnas: Features of Life and Activities, *Faculty of Mathematics and Informatics of Vilnius University*, 66 p.
V. Verikaitė, see [4].

Other lectures and reports

1. **A. Dubickas**, Integer and fractional parts of powers of a number, *University of Genova, Italy, October 5*.
2. **A. Dubickas**, Fractional parts of powers of a number, *University of Pisa, Italy, October 7*.
3. **R. Leipus**, A test for stationarity versus trends and unit roots for a wide class of dependent errors, *Utah State University, March 30*.
4. **R. Leipus**, Stationarity testing, *Utah State University, April 22*.
5. **E. Manstavičius**, Analytic methods in probabilistic combinatorics, *J. W. Goethe University, Frankfurt on Main, December 8*.
6. **E. Manstavičius**, Asymptotic value distribution for additive functions on permutations, *J. W. Goethe University, Frankfurt on Main, December 13*.
7. **E. Manstavičius**, Introduction to the theory of random permutations, *J. W. Goethe University, Frankfurt on Main, November 29*.
8. **E. Manstavičius**, Functional limit theorems for random permutations, *Vilnius Pedagogical University, November 15*.
9. **V. Paulauskas**, On some optimal error estimates in operator-norm approximation of semigroups, *University of Lille, France, April 1*.
10. **V. Paulauskas**, Some results for multi-indexed autoregression models, *University of Lille, France, April 6*.
11. **V. Paulauskas**, On the estimation of the parameters of a spatial AR model, *Technical Univ. of Vienna, Austria, May 19*.
12. **A. Račkauskas**, Off-line testing for a changed segment in the sample variance, *University of Lille, France, November 11*.
13. **E. Stankus**, The survey on projects of mathematics teachers, *Conf. "Science on Stage," Vilnius Teacher Prof. Development Center, December 7*.
14. **E. Stankus**, Random variables and stochastic dependence, *Pasvalys and Panevėžys Teachers Sem., November 25*.
15. **E. Stankus**, Combinatorics, Probability Theory and Statistics in Mathematics a-level, *Alytus Reg. Conf. Math. Teachers, November 19*.
16. **E. Stankus**, Once again on probability theory problems, *Alytus Conf.-Sem. Math. Teachers, August 25*.

SCIENTIFIC CONTACTS

Participation in international projects

1. **R. Baronas, S. Dapkūnas, V. Dičiūnas, K. Lapin, A. Mitašiūnas, S. Norgėla, S. Ragačius, G. Skersys, V. Tumasonis, V. Undzėnas, R. Vaicekauskas.** EC Structural Funds – EFDF financed project *Establishment of Master Study Programme in Software Engineering*. 2005–2008.
2. **M. Bloznelis.** Nordplus Neighbour Scheme. Nordic-Baltic Network Cooperation within Education and Research. Prof. Daniel Thorburn, Stockholm University; Department of Statistics, Stockholm University; Survey Section of Swedish Statistical Association; Department of Mathematical Statistics, University of Jyvaskyla; Vilnius University; Institute of Mathematics and Informatics, Vilnius; University of Latvia; Institute of Mathematical Statistics, University of Tartu, Estonia; Nordic Council of Ministers.
3. **F. Ivanauskas.** Project COST No. 529: *Efficient Lighting for the 21st Century*. 2001 03 02–2006 06 07.
4. **F. Ivanauskas.** Project *Instruments and Standard Test Procedures for Laser Beam and Optics Characterization*, Eureka-number EU2359 Choclab II. 2000–2005.
5. **A. Juozapavičius.** Wireless Information Management (an international network including Aalborg, Jyvaskula, Uppsala, Trondheim, Vilnius, and Vilnius Technological Universities) financed by NORFA (Nordic Academy of Advanced Studies). 2004–2005.
6. **A. Juozapavičius.** Activity leader. BalticGRID (EC, FPG, Contract No. 026715). 2005–2008.
7. **R. Leipus, A. Račkauskas.** NATO Programme for Security through Science NATO grant PST. EAP. CLG 980599 *Detecting changes in time series models*, University of Cologne, Germany, USA, Czechia, Germany, Lithuania.
8. **A. Mitašiūnas, G. Noreikis.** PHARE-financed special action project *Development and Implementing of the Software Connecting the Ciphering Sub-system into the FRTD System*. 2004–2005.
9. **V. Paulauskas, M. C. Viano (France).** Bilateral Lithuanian-France research program *Gilibert*, project *Random processes and their applications to statistics and econometrics* (Vilnius and Lille Universities).
10. **A. Svirskas.** Consultant for the Scientific Coordination team (Kingston University London) in an EU FP6 STREP project *Collaborative Process Automation Support using Service Level Agreements and Intelligent dynamic Agents in SME clusters* (co-dename PANDA). 2005–2008.
11. **E. Stankus.** Project *Science on Stage*. Member of National Steering Committee (<http://www.pprc.lt/ScienceOnStage/en/nk.asp>).
12. **E. Stankus.** The international commission on mathematical instruction (ICMI) representative (<http://www.mathunion.org/ICMI/>).

13. **A. Svirskas.** An external observer of W3C Web Services Choreography Working Group (<http://www.w3.org/2002/ws/chor/>) and liaison for the EU FP6 TrustCoM (<http://www.eu-trustcom.com/>) project.
14. **A. Svirskas.** Collaboration with W3C UK and Ireland Regional Office (<http://www.w3c.rl.ac.uk>) and organizing visits of W3C UK key staff to the events held in Lithuania.
15. **V. Tumasonis.** Participation in Unicode Consortium for developing the Unicode Standard.

Visits by staff

1. **V. Bagdonavičius.** Invited professor at Université Victor Segalen (Bordeaux II), France. Research work in reliability theory and survival analysis. Lectures on probability theory, survival analysis, and mathematical statistics. January 1–June 30.
2. **M. Bloznelis.** Bielefeld University, Germany. December 2–11.
3. **M. Bloznelis.** Stockholm University, Sweden. January 12 – February 10.
4. **M. Bloznelis.** Tartu University, Estonia. January 27 – February 3.
5. **L. Būtėnas.** Aalborg University, Denmark. Research visit. March 2–5.
6. **L. Būtėnas.** Trondheim, Norway. *Intern. Conf. VLDB& WIM*. August 28–September 4.
7. **D. Celov.** University of Lille, France, November 21 – 28.
8. **A. Čivilis.** Aalborg University, Denmark. Research visits. March 1–5, June 8–23.
9. **A. Čivilis.** Trondheim, Norway. *Intern. Conf. VLDB& WIM*. August 28 – September 4.
10. **A. Čivilis.** Russia, Moscow. International Computer Science School. September 19–25.
11. **A. Dubickas.** University of Genova, Italy. Research visit. October 1–9.
12. **F. Ivanauskas.** Bulgaria, Sofia. Management Committee and working group meeting of COST-529. June 18–22.
13. **F. Ivanauskas.** Finland, Helsinki, Conference NAMC18, October 27–30.
14. **A. Juozapavičius.** Estonia, Tallinn. *Conference EstGRID*. January 19–23.
15. **A. Juozapavičius.** Trondheim, Norway. *Intern. Conf. VLDB& WIM*. August 28 – September 4.
16. **A. Juozapavičius.** Russia, Moscow. International Computer Science School. September 18–22.
17. **A. Juozapavičius.** Poland, Krakow. *Conference BalticGRID*. Nowember 23–26.
18. **A. Juozapavičius.** Austria, Wien. Workshop *Vienna-Calling*. December 8–10.
19. **R. Krasauskas.** USA, Houston, Rice University. Talk: *Bezier patches on canal surfaces and applications*. March 5–11.
20. **R. Krasauskas.** Germany, Dagstuhl, Seminar *Geometric Modeling*. Talk *Rational rolling ball blends*. May 28 – June 4.

21. **R. Krasauskas.** Houston, Rice University, USA. Talk *Rational canal surfaces and mu-basis*. November 8–9.
22. **E. Kutka.** Aalborg University, Denmark. Research visits. March 2–5, June 8–23.
23. **E. Kutka.** Trondheim, Norway. *Intern. conference VLDB& WIM*. August 28 – September 4.
24. **E. Kutka.** International Computer Science School. Moscow, Russia. September 18–22.
25. **E. Kutka.** Poland, Krakow. *Conference BalticGRID*. Nowember 23–26.
26. **A. Laurinčikas.** Kyiv University, Ukraine. Research visit. September 25–28.
27. **R. Leipus.** University of Utah, Salt Lake City, JAV. *Lectures for students “Multivariate Analysis,” “Actuarial Mathematics.”* January 1–May 30.
28. **E. Manstavičius.** J. W. Goethe University, Frankfurt on Main, Germany. Research visit. November 20–December 18.
29. **E. Manstavičius.** Geilo, Norvey. The First Spring School on Algorithms. Coordination Boord and Meeting of Nordic Network on Algorithms. March 31–April 04.
30. **A. Mitašiūnas.** Montpellier II University, France. Software process assessment and improvement. May 27–June 1.
31. **A. Mitašiūnas.** SynSpace, Zurich. INTACS certified ISO/IEC 15504 (SPICE) Assessor Training. December 11–17.
32. **V. Paulauskas.** University of Lille, France. April 1–6.
33. **V. Paulauskas.** Technische Universität Wien, Austria. May 16–20.
34. **K. Pileckas.** University of Pohang, South Korea. October 26 – Nowember 11.
35. **A. Račkauskas.** University of Lille, France, November 21 – 28.
36. **S. Ragaišis.** ETH Zurich. Concepts of Software Engineering master study programme. December 13–19.
37. **G. Stepanauskas.** Brussels, Belgium. IST Committee meetings. January 24–27, April 18–21, May 31 – June 3, September 20–23, November 29 – December 2.
38. **A. Svirskas.** London Metropolitan University, December 12–14.
39. **V. Tumasonis.** Fontlab, Rome. The development of linguistic fonts: Palemonas, a computer font for Lithuanian philology. November 15–19.
40. **V. Tumasonis.** St. Petersburg University of Information Technologies, Mechanics and Optics. ACM International Collegiate Programming Contest. November 26–December 2.
41. **V. Zacharovas.** Bielefeld University, Germany. March 1–April 24.
42. **V. Zacharovas.** Academia Sinica, Taiwan. July 1–December 31.
43. **D. Zuokas.** University of Lille, France, November 21 – 28.

Foreign visitors

1. Prof. Bero Roos, Hamburg university, Dresden university. September 5–16. ???
2. Prof. Yann Budeaud, Strasbourg Université, France. Research visit. March 28 – April 3. Lecture at the seminar of number theory: *Complexity of algebraic numbers*, March 30.
3. Prof. R. Goldman, Rice University, Houston, TX, USA. Lecture: *Singularities of curves and mu-basis*. July 7–10.
4. Prof. Neininger Ralph, Frankfurt am Main University, Germany. October 5–11.
5. Prof. A. Pakstas. London Metropolitan University, Consultations on curricula and learning materials for the new Master Study programm in Software Engineering and updated Master Study programme in Informatics. October 23–30, December 15–20.
6. Prof. Shigeki Akiyama, Niigata University, Japan. Research visit. March 8–11. Lecture at the seminar of number theory: *Pisot number system and related tilings*. March 9.
7. Dr. Jörn Steuding, Universidad Autonóma de Madrid, Spain. Research visit. March 1 – April 1. Lecture at the seminar of number theory: *On the structure of the Selberg class*, March 29.
8. Profs. Charles Suquet, Lille 1 University, France, May 15–27.
9. Prof. Marie Claude Viano, Lille 1 University, France, May 15–27.

GRANTS, AWARDS

1. **A. Adamonis, D. Čiukšys, S. Dapkūnas, A. Mitašiūnas, I. Naujikas, S. Ragaišis.** Lithuanian State Science and Studies Foundation grant B-06/2003 to support the research project *Development of Mature Software Process Implementation Methodology and Tools*.
2. **A. Dubickas, P. Drungilas, R. Garunkštis, A. Kačėnas, A. Laurinčikas.** Lithuanian State Science and Studies Foundation grant T-16/05 to support the project *Value distribution of special functions*.
3. **A. Dubickas, R. Garunkštis, A. Kačėnas, A. Laurinčikas**, INTAS grant 03-51-5070. *Analytical and combinatorial methods in number theory*. 2005–2007.
4. **A. Dubickas, A. Laurinčikas, R. Garunkštis, R. Macaitienė, R. Ivanauskaitė, S. Zamarys.** Vilnius University Science Fund grant for the research results in the project *Problems of algebraic and analytic number theory*.
5. L. Giraitis, **R. Leipus, D. Surgailis**. Lithuanian Science Award for the joint work *Long range dependence: models and statistical inference*.
6. **F. Ivanauskas**. Lithuanian State Science and Studies Foundation grant C-07/2003 to support the research project *Computer Simulation of the behavior of heterogeneous processes and systems (MODELITA)* (VU MIF, VU ChF, VU MTMI, KTU, VGTU, BchI, MII, FI). 2003–2006.
7. **A. Juozapavičius**. Lithuanian State Science and Studies Foundation grant B-03027/B-01/2003 to support the project *Transport and Public Information Mobile Solutions* (KTU, VU, VGTU). Scientific advisor R. Plestys (KTU). 2003–2006.

8. **A. Juozapavičius**, Scientific advisor of Lithuanian State Science and Studies Foundation grant No.P-26/05 to support the project *Lithuanian GRID: parallel and distributed computation network*. 2005-2006.
9. **J. Kubilius, E. Manstavičius**, and the staff of the Department of Probability Theory and Number Theory. Vilnius University Science Fund grant for the research results in the project *Discrete problems of number theory and combinatorics*.
10. **A. Mitašiūnas**, G. Noreikis. Grant of Ministry of National Defence of Lithuania: *Draft of regulation in Lithuania of electronic-information security by cryptographic means*. 2004–2005.
11. **V. Paulauskas**. Lithuanian State Science and Studies Foundation grant C-09/2003 to support the project *Mathematical Model of Lithuanian Economy for Forecasting Macroeconomic Processes*. 2003–2006.
12. **V. Tumasonis**. Govermental Programme *Lithuanian Language in Information Society: Standardization of Lithuanian Language Peculiarities in IT; Characters of Lithuanian Language*. 2000-2006.
13. **D. Zuokas**. Awarded by a 2-month Junior Research Fellowship at the Seminar of Statistics of Swiss Federal Institute of Technology in Zurich supported by the GEBERT RÜF STIFTUNG. 2005.

APPENDIX

Publications appeared in 2000–2004

Abbreviations:

<i>LMR</i>	<i>Lietuvos Matematikos Rinkinys</i>
<i>LMJ</i>	<i>Lithuanian Mathematical Journal</i>
<i>NAMC</i>	<i>Nonlinear Analysis: Modelling and Control, ISSN 1392–5133 (Vilnius)</i>
<i>ProcLMS–2000</i>	Special issue of <i>Lietuvos Matematikos Rinkinys</i> , 2000, 40 : <i>Proceedings of XLI Conference of Lithuanian Mathematical Society, Šiauliai, June 22–23, 2000.</i>
<i>FDS–2000</i>	<i>Proceedings of III International Conference “Finite Difference Schemes: Theory and Applications,” September 1–4, 2000, Palanga, Lithuania, Eds. R. Čiegis, A. Samarskii, and M. Sapagovas, IMI, Vilnius, 2000.</i>
<i>ProcLMS–2001</i>	Special issue of <i>Lietuvos Matematikos Rinkinys</i> , 2001, 41 : <i>Proceedings of XLII Conference of Lithuanian Mathematical Society, Klaipėda University, June 22–23, 2001.</i>
<i>Palanga–2001</i>	<i>Analytic and Probabilistic Methods in Number Theory. Proceedings of the Third International Conference in Honour of J. Kubilius, Palanga, Lithuania, September 24–28, 2001 (Eds. A. Dubickas, A. Laurinčikas, and E. Manstavičius), TEV, Vilnius, 2002.</i>
<i>ProcLMS–2002</i>	Special issue of <i>Lietuvos Matematikos Rinkinys</i> , 2002, 42 : <i>Proceedings of XLIII Conference of Lithuanian Mathematical Society, Vilnius Military Academy, June 22–23, 2002.</i>
<i>ProcLMS–2003</i>	Special issue of <i>Lietuvos Matematikos Rinkinys</i> , 2003, 43 : <i>Proceedings of XLIV Conference of Lithuanian Mathematical Society, June 19–20, Vilnius Pedagogical University, 2003.</i>
<i>ProcLMS–2004</i>	Special issue of <i>Lietuvos Matematikos Rinkinys</i> , 2004, 44 : <i>Proceedings of XLV Conference of Lithuanian Mathematical Society, June 17–18, 2004, Lithuanian University of Agriculture, Kaunas.</i>

2000

Articles: Journals with ISI Science Citation Index

1. **V. Bagdonavičius** and M. Nikulin, Modèle statistique de dégradation avec des covariables dépendants du temps (Statistical model of degradation with time dependent covariates), *C. R. Acad. Sci. Paris, Ser. I, Math.*, 2000, **330**(2), p. 131–134.
2. **V. Bagdonavičius** and M. Nikulin, On goodness-of-fit for the linear transformation and frailty models, *Stat. Probab. Letters*, 2000, **47**(2), p. 177–188.
3. **V. Bagdonavičius** and M. Nikulin, On nonparametric estimation in accelerated experiments with step-stresses, *Statistics*, 2000, **33**(4), p. 349–365.
4. **R. Baronas, F. Ivanauskas**, and A. Survila, Simulation of electrochemical behavior of partially blocked electrodes under linear potential sweep conditions, *J. Math. Chemistry*, 2000, **27**(4), p. 267–278.

5. **A. Bastys**, Translation invariance of orthogonal multiresolution analyses of $L^2(R)$, *Appl. Comput. Harmonic Analysis*, 2000, **9**, p. 128–145.
6. V. Bentkus, **A. Juozulynas**, and **V. Paulauskas**, Bounds for stable measures of convex shells and stable approximations, *Ann. Probab.*, 2000, **28**(3), p. 1–19.
7. **M. Bloznelis** and F. Götze, An Edgeworth expansion for finite population U -statistics, *Bernoulli*, 2000, **6**, p. 729–760.
8. **V. Čekanavičius** and **J. Kruopis**, Signed Poisson approximation: a possible alternative to normal and Poisson laws, *Bernoulli*, 2000, **6**(4), p. 591–606.
9. **R. Čiegis**, **V. Starikovičius**, and J. Wasniewski, On the efficiency of scheduling algorithms for parallel Gaussian elimination with communication delays, *Lect. Notes Comp. Sc.*, 2000, **1947**, PARA2000, *The Fifth Workshop on Applied Parallel Computing* (Eds. T. Strevik, F. Manne, R. Moe, and A. H. Gebremedhin), p. 75–82.
10. Yu. Davydov, **V. Paulauskas**, and **A. Račkauskas**, More on p -stable convex sets in Banach spaces, *J. Theoret. Probab.*, 2000, **13**(1), p. 39–64.
11. **A. Dubickas**, On the measure of a nonreciprocal algebraic number, *The Ramanujan J.*, 2000, **4**(3), p. 291–298.
12. **R. Garunkštis** and **A. Laurinčikas**, The Lerch zeta-function, *Integral Transforms and Special Functions*, 2000, **10**(3–4), p. 211–226.
13. L. Giraitis, P. Kokoszka, and **R. Leipus**, Stationary ARCH models: dependence structure and Central Limit Theorem, *Econometric Th.*, 2000, **16**, p. 3–22.
14. B. Kaulakys and **T. Meškauskas**, Models for generation $1/f$ noise, *Microelectronics Reliability*, 2000, **40**(40), p. 1781–1785.
15. P. Kokoszka and **R. Leipus**, Change-point estimation in ARCH models, *Bernoulli*, 2000, **6**, p. 513–539.
16. **R. Krasauskas** and C. Maeurer, Studying cyclides with Laguerre geometry, *Computer Aided Geometric Design*, 2000, **17**, p. 101–126.
17. **R. Krasauskas**, H. Pottmann, and J. Walner, Error propagation in geometric constructions, *Computer Aided Design*, 2000, **32**, p. 631–641.
18. **A. Laurinčikas** and K. Matsumoto, The joint universality and the functional independence for Lerch zeta-functions, *Nagoya J. Math.*, 2000, **157**, p. 211–227.
19. **R. Leipus** and M.-C. Viano, Modelling long-memory time series with finite or infinite variance: a general approach, *J. Time Series Analysis*, 2000, **21**(1), p. 61–74.
20. **V. Mackevičius**, A note on synchronization of diffusion, *Math. Comp. Simul.*, 2000, **52**, p. 491–495.
21. S. A. Nazarov and **K. Pileckas**, On steady Stokes and Navier–Stokes problems with zero velocity at infinity in a three-dimensional exterior domain, *J. Math. Kyoto Univ.*, 2000, **40**(3), p. 69–86.
22. **S. Zubė**, The n -sided toric patches and A -resultant, *Computer Aided Geometric Design*, 2000, **17**, p. 695–714.

Articles: International reviewed journals and proceedings

23. **V. Bagdonavičius** and M. Nikulin, Semiparametric estimation in the generalized additive-multiplicative model, *J. Math. Sc.*, 2000, **99**(2), p. 1017–1030.
24. **V. Bagdonavičius** and M. Nikulin, Semiparametric estimation in accelerated life testing, In: *Recent Advances in Reliability Theory. Methodology, Practice and Inference* (Eds. N. Limnios and M. Nikulin), 2000, Birkhauser, Boston, p. 405–418.
25. **V. Bagdonavičius** and M. Nikulin, Expériences accélérées: analyse statistique du modèle standard de vie accélérée, *Revue de Statistique Appliquée*, 2000, **48**(3), p. 5–38.
26. **R. Baronas** and **F. Ivanauskas**, The influence of the diffusion space geometry on behavior of a biosensor, *Proc. XIII Nordic Sem. Comput. Mechanics (NSCM–13), Oslo, October 20–21, 2000* (Eds. J. Hellesland, H. Osnes, and G. Skeie), *Mech. Appl. Math. Series*, 2000, **7** Matematisk Institutt, Oslo, p. 233–236.
27. **R. Baronas**, **F. Ivanauskas**, and M. Sapagovas, Numerical investigation of moisture movement in wood during drying, *FDS–2000*, p. 11–22.
28. **M. Bloznelis** and **V. Paulauskas**, Central limit theorem in $D[0, 1]$, *Skorokhod's Ideas in Probability Theory* (Eds. V. Korolyuk, N. Portenko, and H. Syta), *Mathematics and its Applications, Proc. Institute of Mathematics of the National Academy of Sciences of Ukraine*, Kyiv, 2000, **32**, p. 99–110.
29. **R. Čiegis**, **V. Starikovičius**, and J. Wasniewski, Perfomance prediction tool for parallel Gaussian elimination algorithm, *FDS–2000*, p. 29–38.
30. **R. Čiegis**, A. Dementjev, **F. Ivanauskas**, V. Girdauskas, V. Lasys, R. Navakas, P. Platé, **R. Vaicekauskas**, and O. Vrublevskaya, Modelling of changes of pulse propagation factors in nonlinear optical processes, *Proc. Intern. School Quantum Electronics, 28th Course: Laser Beam and Optics Characterization* (Eds. H. Weber and H. Laabs), Erice–Sicily: March 22–25, 2000, Berlin, 2000, p. 238–259.
31. **D. Čiuksys**, **A. Mitašiūnas**, and **S. Ragaišis**, Model of reports based information system. Databases and Information Systems, *Proc. IV IEEE Intern. Baltic Workshop, Technika*, Vilnius, 2000, **2**, p. 160–167.
32. **V. Čyras** and **K. Lapin**, Various perspectives of automatic configuration of structured graphical documents, *Machine Graphics and Vision. Intern. J., Proc. of the 6th Conf. of Computer Graphics and Image Processing, GPKO'2000 held in Podlesice, Poland: May 15–19, 2000* 2000, **9**(1–2), p. 57–80.
33. **A. Dubickas**, A note on powers of Pisot numbers, *Publ. Math. Debrecen*, 2000, **56**(1–2), p. 141–144.
34. **A. Dubickas**, On the measure of nonreciprocal algebraic number, *The Ramanujan J.*, 2000, **4**(3), p. 291–298.
35. L. Giraitis, P. Kokoszka, **R. Leipus**, and G. Teyssiere, Semiparametric estimation of the intensity of long memory in conditional heteroskedasticity, *Statistical Inference for Stochastic Processes*, 2000, **3**, p. 113–128.
36. **A. Juozapavičius** and J. Skučas, Temporal properties in object modeling and their implementation in relational databases, *Proc. IV IEEE Intern. Baltic Workshop, May 1–5, 2000*, Vilnius, 2000, p. 75–85.

37. **K. Karčiauskas** and **R. Krasauskas**, Comparison of different multisided patches using algebraic geometry, *Curve and Surface Design: Saint-Malo, 1999* (Eds. P. J. Laurent, P. Sablonniere, and L. L. Schumaker), Vanderbilt Univ. Press, Nashville, 2000, p. 163–172.
38. P. Kokoszka and **R. Leipus**, Detection and estimation of changes in ARCH processes, *Measuring Risk in Complex Stochastic Systems* (Eds. J. Franke et al.), Springer, Berlin, 2000, p. 177–190.
39. P. Lachout and **V. Paulauskas**, On the second-order asymptotic distribution of M -estimators, *Statistics & Decisions*, 2000, **18**, p. 231–257.
40. **T. Meškauskas** and **F. Ivanauskas**, On numerical algorithms for derivative nonlinear Schrödinger equation, *FDS–2000*, 2000, p. 89–98.
41. H. Pottmann, **R. Krasauskas**, B. Hamann, K. Joy, and W. Seibold, On piecewise linear approximation of quadratic functions, *J. Geometry and Graphics*, 2000, **4**(1), p. 31–53.
42. **K. Pileckas**, A. Sequeira, and J. H. Videman, Steady flows of viscoelastic fluids in domains with outlets to infinity, *J. Math. Fluid Mech.*, 2000, **2**, p. 185–218.
43. **V. Skakauskas**, Solvability and asymptotic behavior of a population problem taking into account random mating and females' pregnancy, *Intern. J. Appl. Math. Comp. Sci.*, 2000, **10**(1), p. 37–61.

Articles: Lithuanian licensed journals and proceedings

44. **A. Apynis**, **E. Stankus**, and J. Šinkūnas, On seeing-off the first graduates of the Lithuanian school for young mathematicians, *ProcLMS–2000*, p. 207–208 (in Lithuanian).
45. **G. Bareikis**, An analogue of the Kubilius inequality for the polynomial semigroup, *ProcLMS–2000*, p. 11–17 (in Lithuanian).
46. **R. Baronas**, **F. Ivanauskas**, J. Kulys, M. Sapagovas, and A. Survila, The influence of diffusion space geometry on behavior of some processes in biochemistry and electrochemistry, *NAMC*, 2000, **5**, p. 3–38.
47. R. Blake and **A. Juozapavičius**, Quality of colour image segmentation: the measures, *NAMC*, 2000, **5**, p. 53–66.
48. **M. Bložnelis**, One- and two-term Edgeworth expansions for finite population sample mean. Exact results. I, *LMR*, 2000, **40**(3), p. 277–294 = *LMJ*, 2000, **40**(3), p. 213–227.
49. **M. Bložnelis**, One- and two-term Edgeworth expansions for finite population sample mean. Exact results. II *LMR*, 2000, **40**(4), p. 430–443 = *LMJ*, 2000, **40**(4), p. 329–340.
50. I. Blužaitė, J. Blužas, G. Jurelevičienė, S. Kaminskienė, A. Matiuka, R. Ruseckas, R. Širvytė, **E. Povilonis**, M. Tamošiūnaitė, and G. Urbanavičienė, Sudden death prediction based on heart rate variability and electrical cardiac axis position, *Lith. J. Cardiology*, 2000, **7**(3) (in Lithuanian).
51. J. Blužas, L. Gargasas, A. Vainoras, S. Korsakas, A. Kirmonas, R. Ruseckas, V. Miškinis, I. Blužaitė, G. Urbanavičienė, R. Vaišnys, J. Šimkevičius, M. Tamošiūnaitė, **A.**

- Bastys, T. Meškauskas**, and A. Matiukas, Medicine and electronics: hearts and integrated circuits, *Elektronika ir Elektrotehnika*, 2000, **2**(25), p. 54–62.
52. F. Coquet, **V. Mackevičius**, and J. Mémin, Some examples and counterexamples of convergence of σ -algebras and filtrations, *LMR*, 2000, **40**(3), p. 295–306 (in French) = *LMJ*, 2000, **40**(3), p. 228–235.
 53. **V. Čekanavičius**, Remarks on estimates in total variation metric, *LMR*, 2000, **40**(1), p. 1–16 (in Russian) = *LMJ*, 2000, **40**(1), p. 1–13.
 54. **R. Čiegeis**, **V. Starikovičius**, and A. Volkas, A mathematical modeling of the wood drying, *ProcLMS–2000*, p. 343–349 (in Lithuanian).
 55. **V. Dagienė** and O. Kurasova, Modelling: the basic concepts, *Informatica*, **1**(35), 2000, p. 102–112.
 56. A. Dement'ev, R. Navakas, and **R. Vaicekauskas**, Modelling of generation dynamics of passively and actively Q -switched solid-state lasers, *Math. Modelling Analysis, Technika*, Vilnius, 2000, **5**, p. 32–43.
 57. **V. Dičiūnas** and S. Raudys, Generalization error of randomized linear zero empirical error classifier: Simple asymptotics for centered data case, *Informatica*, **11**(4), 2000, p. 381–396.
 58. **A. Dubickas**, On certain geometric mean of the values of a polynomial, *LMR*, 2000, **40**(1), p. 17–27 = *LMJ*, 2000, **40**(1), p. 14–22.
 59. **A. Dubickas**, Totally real algebraic integers in small intervals, *LMR*, 2000, **40**(3), p. 307–312 = *LMJ*, 2000, **40**(3), p. 236–240.
 60. **A. Dubickas**, On heights of polynomials with real roots, *NAMC*, 2000, **5**, p. 67–75.
 61. **R. Eidukevičius**, O. Rudzevičienė, and I. Narkevičiūtė, Atopic dermatitis and changes of fecal Bifidobacteria and E.coli, *Health Sciences*, 2000, **2**, p. 25–28.
 62. **R. Garunkštis**, A note on the Riemann ξ -function, *ProcLMS–2000*, p. 18–20 (in Lithuanian).
 63. G. Grigas and **V. Tumasonis**, New Lithuanian keyboard standart, *Informacijos Moksmai*, 2000, **14**, p. 105–112.
 64. **A. Kačėnas** and **A. Laurinčikas**, A note on the value-distribution of the periodic zeta-function, *ProcLMS–2000*, p. 28–32.
 65. **R. Kačinskaitė**, A discrete limit theorem for the Matsumoto zeta-function on the complex plane, *LMR*, 2000, **40**(4), p. 475–492 (in Russian) = *LMJ*, 2000, **40**(4), p. 364–378.
 66. **R. Kačinskaitė**, On the value distribution of Matsumoto zeta-function on the complex plane, *ProcLMS–2000*, p. 33–38.
 67. **K. Karčiauskas** and **R. Krasauskas**, Rational rolling ball blending of natural quadrics, *Math. Modelling Analysis*, Vilnius, 2000, **5**, p. 97–107.
 68. **P. Kasparaitis**, Automatic stressing of the Lithuanian text on the basis of a dictionary, *Informatica*, 2000, **11**(1), p. 19–40.
 69. M. Kazakevičiūtė and **R. Krasauskas**, Blending cylinders and cones using canal surfaces, *NAMC*, 2000, **5**, p. 77–89.
 70. **A. Laurinčikas**, A remark on negative moments of the Riemann zeta-function, *LMR*, 2000, **40**(1), p. 28–35 (in Russian) = *LMJ*, 2000, **40**(1), p. 23–28.

71. **A. Laurinčikas**, On the effectivization of the universality theorem for the Lerch zeta-function, *LMR*, 2000, **40**(2), p. 172–178 (in Russian) = *LMJ*, 2000, **40**(2), p. 135–139.
72. **A. Laurinčikas**, On the mean square of the Lerch zeta-function with respect to the parameter, *ProcLMS–2000*, p. 43–48.
73. **A. Laurinčikas**, On Sprindjuk’s works in *Lietuvos Matematikos Rinkinys*, *ProcLMS–2000*, p. 226–231.
74. **E. Manstavičius**, On the frequency of multisets without some components, *ProcLMS–2000*, p. 55–60.
75. **E. Manstavičius** and R. Skrabutėnas, An analytic problem for combinatorial structures, *ProcLMS–2000*, p. 61–67 (in Lithuanian).
76. **H. Markšaitis**, On Galois groups of p -extensions with two ramification places, *LMR*, 2000, **40**(1), p. 48–60 (in Russian) = *LMJ*, 2000, **40**(1), p. 39–47.
77. **H. Markšaitis**, A construction of some p -extensions of the rational numbers field, *LMR*, 2000, **40**(2), p. 179–189 (in Russian) = *LMJ*, 2000, **40**(2), p. 140–147.
78. **T. Meškauskas**, R. Vaišnys, A. Matiukas, M. Tamošiūnaitė, I. Blužaitė, G. Urbonaviciene, and J. Blužas, Spectral slope analysis for sudden death prediction, *Lith. J. Cardiology*, 2000, **7**(1), p. 8–17.
79. **G. Misevičius**, Uniform distribution of four-dimensional torus. I, *ProcLMS–2000*, p. 68–75.
80. **K. Navickis**, On intrinsic normalizations of sem non holonomic complexes SNGr $(m, n, (m + 1), (n - m) - \rho)$. II, *LMR*, 2000, **40**(1), p. 61–81 (in Russian) = *LMJ*, 2000, **40**(1), p. 48–64.
81. **K. Navickis**, Geometry of distribution of flags on the Grassmann manifolds of the projective space. I, *LMR*, 2000, **40**(2), p. 214–227 (in Russian) = *LMJ*, 2000, **40**(2), p. 166–175.
82. **K. Navickis**, Geometry of distribution of flags on the Grassmann manifolds of the projective space. II, *LMR*, 2000, **40**(3), p. 335–349 (in Russian) = *LMJ*, 2000, **40**(3), p. 258–268.
83. **K. Navickis**, Geometry of frame bundles, *ProcLMS–2000*, p. 161–165 (in Russian).
84. **S. Norgėla**, A resolution calculus for modal logic S4, *ProcLMS–2000*, p. 270–274.
85. **S. Norgėla**, Two decidable classes of modal logic S5, *LMR*, 2000, **40**(3), p. 350–360 (in Russian) = *LMJ*, 2000, **40**(3), p. 269–276.
86. A. Pincevičius, R. J. Rakauskas, and **G. Misevičius**, Mathematical modelling of military operations, *ProcLMS–2000*, p. 423–429 (in Lithuanian).
87. **G. Puriuškis**, On the blow-up time for solutions of a Schrödinger equation system, *ProcLMS–2000*, p. 136–139 (in Russian).
88. **V. Skakauskas**, Two population dynamics models with child care, *Informatica*, 2000, **11**(2), p. 195–218.
89. **V. Skakauskas**, A mathematical model for limited sociologically structured human community, *LMR*, 2000, **40**(1), p. 82–112 = *LMJ*, 2000, **40**(1), p. 65–88.
90. **G. Skersys**, Computing permutation groups of error-correcting codes, *ProcLMS–2000*, p. 320–328.

91. **V. Stakėnas**, On local frequencies related to Farey fractions, *LMR*, 2000, **40**(1), p. 113–131 (in Russian) = *LMJ*, 2000, **40**(1), p. 89–103.
92. **V. Stakėnas**, On integer parts of some sequences, *ProcLMS–2000*, p. 76–80.
93. **E. Stankus**, On an analytic extension of Euler products, *ProcLMS–2000*, p. 81–84 (in Lithuanian).
94. **D. Sudžiūtė**, The convergence of Nash equilibria in a timing game, *ProcLMS–2000*, p. 329–333 (in Lithuanian).
95. **J. Šiaulys**, Factorial moments for distributions of additive functions, *LMR*, 2000, **40**(4), p. 508–523 (in Russian) = *LMJ*, 2000, **40**(4), p. 508–525.
96. **R. Šleževičienė**, A joint limit theorem for trigonometric polynomials, *ProcLMS–2000*, p. 85–90.

Articles: Other journals and proceedings

97. **A. Apynis, E. Stankus**, and J. Šinkūnas, On realization of curriculum and problems of the Lithuanian school for young mathematicians, *Proc. Conf. Mathematics and Teaching Mathematics, Kaunas Univ. of Technology, April 6–7, 2000*, Technologija, Kaunas, 2000, p. 10–13 (in Lithuanian).
98. **S. Dapkūnas** and **A. Mitašiūnas**, Information system for complaints' investigation, *Proc. Conf. Integrated Syst. Design and Manufacturing*, Kaunas, 2000, p. 42–46.
99. **S. Dapkūnas** and **A. Mitašiūnas**, Experience in development of information system for complaints' investigation, *Proc. Conf. Information Technology' 2000, Kaunas Univ. of Technology*, Technologija, Kaunas, 2000, p. 7–9.
100. **J. Ignatavičiūtė**, A limit theorem for the Lerch zeta-function, *Proc. III Lith. Conf. Young Scientists "Lithuania without science – Lithuania without future," April 27–October 16, 2000, Vilnius, Technika*, Vilnius, 2000, p. 165–180.
101. **J. Ignatavičiūtė**, A limit theorem for the Lerch zeta-function on the space of analytic functions, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2000, **3**, p. 5–13.
102. **R. Kačinskaitė**, On the approximation in mean of the Matsumoto zeta-function by absolutely convergent Dirichlet series, *Proc. III Lith. Conf. Young Scientists "Lithuania without science – Lithuania without future", April 27 – October 16, 2000, Vilnius, Technika*, Vilnius, 2000, p. 147–156.
103. **K. Lapin**, Knowledge categories in the layout configuration task, *Proc. IV IEEE Intern. Baltic Workshop "Databases & Information Systems," May 1–5, 2000, Vilnius*, **2**, p. 289–299.
104. **A. Laurinčikas**, The universality of Dirichlet series, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2000, **3**, p. 27–34.
105. **A. Laurinčikas**, The Lerch zeta-function. I, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2000, **3**, p. 35–45.
106. **A. Laurinčikas**, The Riemann zeta-function: results and problems. III. Limit theorems, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2000, **3**, p. 46–56.
107. **R. Leipus**, Long memory modelling in financial time series, *Proc. Conf. "Mathematical Methods in Finance and Econometrics"*, June 27–29, 2000, Minsk, p. 101–107.

108. A. Mitašiūnas, S. Ragaišis, and V. Undžėnas, Legal aspects of electronic signature, *Proc. Conf. Information Technology'2000, Kaunas Univ. of Technology*, Technologija, Kaunas, 2000, p. 36–38 (in Lithuanian).
109. R. Šleževičienė, One multidimensional weighted limit theorem for the Riemann zeta-function on the complex plane, in: *Proc. III Lith. Conf. of Young Scientists “Lithuania without science – Lithuania without future”, April 27–October 16, 2000, Vilnius, Technika*, Vilnius, 2000, p. 157–164.

2001

Monographs

1. V. Bagdonavičius and M. Nikulin, Accelerated Life Models. Modeling and Statistical Analysis, Chapman & Hall/CRC, New York, 2001, 334 p.

Articles: Journals with ISI Science Citation Index

1. V. Bagdonavičius and M. Nikulin, Estimation in degradation models with explanatory covariates, *Lifetime data analysis*, 2001, **7**, p. 85–103.
2. V. Bagdonavičius and M. Nikulin, On goodness-of-fit for accelerated life models, *C. R. Acad. Sc. Paris*, 2001, **332**, Ser. I, p. 171–176.
3. R. Baronas, F. Ivanauskas, and M. Sapagovas, The influence of wood specimen geometry on moisture movement during drying, *Wood and Fiber Science*, 2001, **33**(2), p. 166–172.
4. V. Bentkus, A. Juozulynas, and V. Paulauskas, Levy–LePage series representation of stable vectors: Convergence in variation, *J. Theoret. Prob.*, 2001, **14**(4), p. 949–978.
5. M. Bloznelis and F. Götze, Orthogonal decomposition of finite population statistics and its applications to distributional asymptotics, *The Annals of Statistics*, 2001, **29**, p. 899–917.
6. A. Dubickas and C. J. Smyth, On the metric Mahler measure, *J. Number Th.*, 2001, **86**, p. 368–387.
7. A. Dubickas and C. J. Smyth., On the Remak height, the Mahler measure, and conjugate sets of algebraic numbers lying on two circles, *Proc. Edinburgh Math. Soc.*, 2001, **44**, p. 1–17.
8. A. Dubickas, Three problems for polynomials of small measure, *Acta Arith.*, 2001, **98**(3), p. 279–292.
9. L. Giraitis, P. Kokoszka, R. Leipus, Testing for long memory in the presence of a general trend, *J. Appl. Probab.*, 2001, **38**, p. 1033–1054.
10. F. Ivanauskas, R. Gaška, M. S. Shur, R. Vaicekauskas, and A. Žukauskas, Optimization of multichip white solid-state lighting source with four or more LEDs, *Proc. of SPIE*, Bellingham, 2001, **4445**, p. 148–155.
11. A. Laurinčikas, A joint limit theorem for zeta-functions attached to certain cusp forms, *Publicationes Mathematicae Debrecen*, 2001, **59**(1–2), p. 175–186.
12. A. Laurinčikas and K. Matsumoto, The universality of zeta-functions attached to certain cusp forms, *Acta Arithmetica*, 2001, **98**(4), p. 346–359.

13. **V. Mackevičius** and **J. Navikas**, Second order weak Runge–Kutta type approximations for Itô equations, *Math. Comp. Simul.*, 2001, **57**(1–2), p. 29–34.
14. S. Mitnik, **V. Paulauskas**, and S. T. Rachev, Statistical inference in regression with heavy-tailed integrated variables, *Math. Computer Modelling*, 2001, **34**, p. 1145–1158.
15. **A. Račkauskas** and C. Suquet, Invariance principles for adaptive self-normalized partial sums processes, *Stoch. Proc. Appl.*, 2001, **95**, p. 63–81.

Articles: International reviewed journals and proceedings

16. **V. Bagdonavičius** and **R. Levulienė**, on goodness-of-fit for the absence of memory model, *Kybernetika*, 2001, **37**, p. 685–702.
17. **V. Bagdonavičius** and M. Nikulin, Estimation of cycling effect on reliability, In: *Probability and Statistical Models with Applications* (Eds. Ch. A. Charalambides, M. V. Koutras, and N. Balakrishnan), Chapman and Hall/CRC, 2001, p. 537–545.
18. **V. Bagdonavičius** and M. Nikulin, Mathematical models in the theory of accelerated experiments, In: *Mathematics and the 21st Century* (Eds. A. A. Ashour, A-S. F. Obada), World Scientific, 2001, p. 271–303.
19. **V. Bagdonavičius** and M. Nikulin, Goodness-of-fit tests for the generalized additive risk models, In: *Asymptotic Methods in Probability and Statistics with Applications* (Eds. N. Balakrishnan, I. Ibragimov, and V. Nevzorov), Birkhauser, Boston Berlin, 2001, p. 385–394.
20. **R. Baronas** and **F. Ivanauskas**, Reducing of dimensionality in modelling of moisture diffusion process in porous solid, *Structural Mechanics, Proc. XIV Nordic Sem. Computational Mechanics, Lund, October 19–20, 2001* (Eds. L. Beldie, O. Dahlblom, A. Olsson et al), LTH, Lund University (Sweden), 2001, p. 97–100.
21. **A. Bastys**, I. Blužaitė, J. Blužas, Sv. Kaminskienė, A. Matiukas, M. Tamošiūnaitė, G. Urbonavičienė, and J. R. Vaišnys, Computerized approach for revealing coronary artery stenosis, *New Trends in Research, Diagnosis and Treatment. Proc. II Intern. Congress on Heart Disease, July 21–24, 2001, Washington*, p. 375–379.
22. **R. Čiegis** and **V. Starikovičius**, The finite difference scheme for 3D mathematical modeling of a wood drying process, *Comput. Methods Appl. Math.*, 2001, **1**(2), p. 125–137.
23. **D. Čiukšys**, **A. Mitašiūnas**, and **S. Ragaišis**, Model of reports based information system, In: *Databases and Information Systems* (Eds. J. Barzdins and A. Čaplinskas), Kluwer Academic Publishers, 2001, p. 307–316.
24. **J. Dabulytė**, L. Giniūnas, and **F. Ivanauskas**, The minimization of stretches in diode-pumped solid-state-laser, *Structural Mechanics, Proc. XIV Nordic Sem. Computational Mechanics, Lund, October 19–20, 2001* (Eds. L. Beldie, O. Dahlblom, A. Olsson et al), LTH, Lund University (Sweden), 2001, p. 63–66.
25. **A. Dubickas** and C. J. Smyth, The Lehmer constants of an annulus, *J. Théorie des Nombres de Bordeaux*, 2001, **13**(2), p. 413–420.
26. F. Götze and **A. Račkauskas**, Adaptive choice of bootstrap sample sizes, In: *State of the Art in Probability and Statistics*, Lecture Notes-Monograph Series, 2001, **36**, p. 286–309.

27. K.-H. Indlekofer and **E. Manstavičius**, Distribution of multiplicative functions defined on semigroups, *Quaestiones Mathematicae*, 2001, **24**(3), p. 335–347.
28. **A. Janeliūnas**, Bias correction of linear classifiers in the classifiers combination scheme, *Proc. Intern. Conf. Neural Networks and Artificial Intelligence, October 2–5, 2001, Minsk, Belarus* (Ed. R. Sadykhov), p. 91–98.
29. **A. Juozapavičius** and **F. Ivanauskas**, Statistical modeling of white stork population, *New Trends in Statistical Modelling, Proc. XVI Intern. Workshop on Statistical Modelling, Odense, Denmark, July 2–6, 2001*, p. 457–460.
30. **K. Karčiauskas**, Biangle surface patches, In: *Math. Methods for Curves and Surfaces, Oslo, 2000* (Eds. T. Lyche and L. L. Schumaker), Vanderbilt Univ. Press, Nashville, 2001, p. 233–242.
31. P. Kokoszka and **R. Leipus**, Detection and estimation of changes in regime, In: *Long-range Dependence: Theory and Applications* (Eds. M. S. Taqqu et al.), Birkhauser, 2001, p. 000–000.
32. **R. Krasauskas**, Shape of toric surfaces, *Proc. Spring Conf. Computer Graphics, April 25–28, 2001, Budmerice, Slovakia*, p. 55–62.
33. **J. Kubilius**, Recent progress in probabilistic number theory, In: *Asymptotic Methods in Probability and Statistics with Applications* (Eds. N. Balakrishnan, I. A. Ibragimov, and V. B. Nevzorov), Birkhäuser, Boston Berlin, 2001, p. 507–519.
34. **J. Kubilius**, On the remainder term in the limit theorems for additive arithmetical functions, In: *Bolyai Soc. Math. Studies. X: Paul Erdős and His Mathematics. I, Budapest (Hungary), 1998*, Budapest, 2001, p. 355–362.
35. **A. Laurinčikas**, The universality of Dirichlet series attached to finite Abelian groups, In: *Number Theory: Proc. Turku Symp. Number Theory in memory of Kustaa Inkeri, May 31–June 4, 1999* (Eds. M. Jutila and T. Metsänkylä), Walter de Gruyter, Berlin New-York, 2001, p. 179–192.
36. **E. Manstavičius**, On random permutations without cycles of some lengths, *Periodica Mathematica Hungaria*, 2001, **42**(1–2), p. 37–44.
37. **E. Manstavičius**, Functional limit theorems in probabilistic number theory, *Bolyai Soc. Mathematical Studies. X: Paul Erdős and His Mathematics. I, Budapest (Hungary), 1998*, Budapest, 2001, p. 465–491.
38. **E. Manstavičius**, On the probability of combinatorial structures without some components, In: *Number Theory for the Millennium*. (Eds. B. C. Berndt et al.), A. K. Peters, Boston, 2001, p. 387–401.
39. **E. Povilonis**, **Š. Raudys**, and A. Saudargienė, The bias evaluation in model selection, *Proc. Intern. Conf. Neural Networks and Artificial Intelligence, October 2–5, 2001, Minsk, Belarus* (Ed. R. Sadykhov), p. 32–39.
40. **A. Račkauskas** and C. Suquet, Hölder versions of Banach space valued random fields, *Georgian Math. J.*, 2001, **8**(2), p. 347–362.
41. **Š. Raudys**, *Statistical and Neural Classifiers: An Integrated Approach to Design*, Springer, London, 2001, 312 p.
42. **G. Skersys**, The average dimension of the hull of cyclic codes, *Proc. Workshop on Coding and Cryptography, INRIA, Paris*, 2001, p. 477–486.

43. **A. Svirskas** and **J. Sakalauskaitė**, Development of distributed systems with Java and CORBA issues and solutions, In: *Databases and Information Systems* (Eds. J. Barzdins and A. Čaplinskas), Kluwer Academic Publishers, 2001, p. 125–138.

Articles: Lithuanian licensed journals and proceedings

44. **V. Bagdonavičius**, **A. Bikėlis**, **M. Meilūnas**, and D. Stoškuvienė, On the human's vital functions degradation modelling, *Math. Modeling and Analysis*, 2001, **6**(1), p. 28–38.
45. **V. Bagdonavičius**, **A. Bikėlis**, and **V. Kazakevičius**, Large sample properties of the tire wear rate and failure intensities estimates, *ProcLMS–2001*, p. 423–430.
46. **G. Bareikis**, The Selberg sieve method in the polynomial set, *ProcLMS–2001*, p. 39–44.
47. **R. Baronas**, **F. Ivanauskas**, and M. Sapagovas, Numerical investigation of moisture movement in wood under isothermal conditions, *Math. Modelling and Analysis*, 2001, **6**(2), p. 167–177.
48. **R. Baronas**, **F. Ivanauskas**, I. Juodeikiene, and A. Kajalavičius, Modelling of Moisture Movement in Wood During Outdoor Storage, *NAMC*, 2001, **6**(2), p. 3–14.
49. **A. Bastys**, J. Blužas, L. Gargasas, Sv. Kaminskienė, G. Urbonavičienė, and A. Matiuškas, Computer-based prognosis of coronary artery stenosis, *Sem. Cardiology*, 2001, **7**(3), p. 30–32.
50. **A. Bikėlis**, **S. Dapkūnas**, **M. Meilūnas**, and D. Stoškuvienė, On confidence intervals of transition probabilities in the syndrome analysis of death causes, *ProcLMS–2001*, p. 519–526.
51. **M. Bloznelis**, Empirical Edgeworth expansion for finite population statistics. I, *LMR*, 2001, **41**(2), p. 154–171 = *LMJ*, 2001, **41**(2), p. 120–134.
52. **M. Bloznelis**, Empirical Edgeworth expansion for finite population statistics. II, *LMR*, 2001, **41**(3), p. 263–276 = *LMJ*, 2001, **41**(3), p. 207–218.
53. **V. Čekanavičius**, Kornya approximation for dependent indicators, *ProcLMS–2001*, p. 615–619.
54. **V. Čekanavičius** and M. Mikalauskas, Local theorems for the Markov binomial distribution, *LMR*, 2001, **41**(3), p. 277–293 (in Russian) = *LMJ*, 2001, **41**(3), p. 219–231.
55. **V. Čekanavičius** and M. Mikalauskas, Large deviations for the Markov binomial distribution, *LMR*, 2001, **41**(4), p. 393–408 (in Russian) = *LMJ*, 2001, **41**(4), p. 307–318.
56. **V. Čekanavičius** and **P. Vaitkus**, The centered Poisson approximation via the Stein approximation, *LMR*, 2001, **41**(4), p. 409–423 (in Russian) = *LMJ*, 2001, **41**(4), p. 319–329.
57. **R. Čiegis** and **V. Starikovičius**, The finite difference scheme for wood drying process, *Math. Modelling and Analysis*, 2001, **6**(1), p. 48–57.
58. A. Dement'ev, **A. Kurtinaitis**, and **F. Ivanauskas**, Modeling of pulse propagation factor changes in type II second-harmonic generation, *NAMC*, 2001, **6**(2), p. 51–70.
59. **V. Dičiūnas**, Generalization error of randomized linear zero empirical error classifier: Noncentered data case, *Informatica*, 2001, **12**(2), p. 221–238.
60. **A. Domarkas**, R. Rakauskas, and S. Cicénas, Computer algebra and numerical methods, *ProcLMS–2001*, p. 184–191.

61. J. Dranseikienė and **D. Sūdžiūtė**, A competitive two-person zero-sum game with the linear increment function, *ProcLMS–2000*, p. 313–319 (in Lithuanian).
62. **A. Dubickas**, On the trace of algebraic integers of small height, *LMR*, 2001, **41**(3), p. 294–302 = *LMJ*, 2001, **41**(3), p. 232–238.
63. **R. Garunkštis** and J. Steuding, Twists of Lerch zeta-functions, *LMR*, 2001, **40**(2), p. 172–182 = *LMJ*, 2001, **40**(2), p. 135–142.
64. **R. Garunkštis**, A remark on the zeros of the Lerch zeta-function, *ProcLMS–2001*, p. 53–57 (in Lithuanian).
65. **B. Grigelionis**, On statistical experiments observing H -diffusions, *ProcLMS–2001*, p. 158–165.
66. **B. Grigelionis**, Generalized z -distributions and related stochastic processes, *LMR*, **41**(3), 2001, p. 303–319 = *LMJ*, **41**(3), 2001, p. 239–251.
67. **J. Ignatavičiūtė**, On statistical properties of the Lerch zeta-function, *LMR*, 2001, **41**(4), p. 424–440 (in Russian) = *LMJ*, 2001, **41**(4), p. 330–343;
68. **J. Ignatavičiūtė**, A limit theorem for the Hurwitz zeta-function on the space of meromorphic functions, *ProcLMS–2001*, p. 67–72.
69. **F. Ivanauskas**, Training a new generation of researchers in mathematics, *ProcLMS–2001*, p. 20–29 (in Lithuanian).
70. **A. Juozapavičius** and V. Rapševičius, Clustering through decision tree construction in geology, *NAMC*, 2001, **6**(2), p. 29–41.
71. **A. Juozulynas**, Extended classical asymptotic expansions in the case of Gaussian limit distribution, *LMR*, 2001, **41**(2), p. 202–213 = *LMJ*, 2001, **41**(2), p. 158–167.
72. **A. Kačėnas**, The sixth power moment of the Riemann zeta-function in the critical strip, *ProcLMS–2001*, p. 73–75.
73. **A. Kačėnas** and **A. Laurinčikas**, On the periodic zeta-function, *LMR*, 2001, **41**(2), p. 214–226 (in Russian) = *LMJ*, 2001, **41**(2), p. 168–177.
74. **R. Kačinskaitė**, A discrete limit theorem for the Matsumoto zeta-function in the space of analytic functions, *LMR*, 2001, **41**(4), p. 441–448 (in Russian) = *LMJ*, 2001, **41**(4), p. 344–350.
75. **R. Kačinskaitė**, A multidimensional discrete limit theorem for the Matsumoto zeta-functions in the space of analytic functions, *ProcLMS–2001*, p. 76–83.
76. **P. Kasparaitis**, Automatic stressing of the Lithuanian nouns and adjectives on the basis of rules, *Informatica*, 2001, **12**(2), p. 315–336.
77. **R. Kašuba** and J. Mačys, 50 years of Lithuanian Mathematical Olympiads, *ProcLMS–2001*, p. 30–36 (in Lithuanian).
78. **R. Kašuba**, What is a simple but exciting problem?, *ProcLMS–2001*, p. 368–375 (in Lithuanian).
79. **A. Kavaliauskas**, Determination of the instability area of a system using the expansion of an n th order determinant by k th order determinants, *ProcLMS–2001*, p. 200–206 (in Lithuanian).
80. D. Krapavickaitė and **J. Turkuvienė**, Estimation of a sum in an asymmetric population, *ProcLMS–2001*, p. 444–450 (in Lithuanian).

81. **R. Lapinskas, R. Verikaitė**, Population projection: a parametric approach, *ProcLMS–2001*, p. 538–541.
82. **R. Lapinskas and R. Verikaitė**, Population projection: a parametric approach, *ProcLMS–2001*, p. 538–541.
83. **A. Laurinčikas**, Value distribution of general Dirichlet series. II, *LMR*, 2001, **41**(4), p. 449–460 (in Russian) = *LMJ*, 2001, **41**(4), p. 351–360.
84. **A. Laurinčikas**, The mean square of the Lerch zeta-function with respect to the parameter α , *ProcLMS–2001*, p. 88–93.
85. **A. Laurinčikas**, The investigation of zeta-functions in Lithuania, *ProcLMS–2001*, p. 383–388.
86. **A. Laurinčikas**, On $H(D)$ -valued random elements, *ProcLMS–2001*, p. 632–636.
87. **A. Laurinčikas and D. Šiaučiūnas**, On the periodic zeta-function. II, *LMR*, 2001, **41**(4), p. 461–476 (in Russian) = *LMJ*, 2001, **41**(4), p. 361–372.
88. **A. Laurinčikas and R. Šleževičienė**, On the universality of Dirichlet series with multiplicative coefficients, *ProcLMS–2001*, p. 94–99.
89. **A. Laurinčikas and R. Šleževičienė**, On the denseness of one set of series, *NAMC*, 2001, **6**(1), p. 79–88.
90. **A. Mačiulis and J. Šiaulys**, On the limits for distributions of additive functions, *ProcLMS–2000*, p. 49–54 .
91. **V. Maniušis**, New symmetry tests for distributions, *ProcLMS–2001*, p. 451–456.
92. **E. Manstavičius**, An estimate for the Taylor coefficients, *ProcLMS–2001*, p. 100–105.
93. **G. Misevičius**, Uniform distribution on the four-dimensional torus. II, *ProcLMS–2001*, p. 106–112.
94. **S. Norgėla**, Development of computer science studies at the Faculty of Mathematics and Informatics of the Vilnius University, *ProcLMS–2001*, p. 313–319.
95. **S. Norgėla**, Some decidable classes of formulas of modal logic S4, *ProcLMS–2001*, p. 408–412.
96. **G. Puriuškis**, On an elliptic system of second-order partial differential equations, *ProcLMS–2001*, p. 227–231 (in Russian).
97. **G. Puriuškis**, A system of Schrödinger equations in the critical case, *LMR*, 2001, **41**(1), p. 84–92 (in Russian) = *LMJ*, 2001, **41**(1), p. 65–71.
98. **M. Radavičius**, J. Sušinskas, A. Utkus, Statistical analysis of congenital anomalies in children in Lithuania, *ProcLMS–2001*, p. 469–477.
99. **V. Skakauskas**, On the sociologically-structured human community dynamics model, *LMR*, 2001, **41**(1), p. 108–131 = *LMJ*, 2001, **41**(1), p. 83–101.
100. **V. Stakėnas**, On integral and fractional parts of some sequences, *ProcLMS–2001*, p. 119–124.
101. **E. Stankus**, A correction of the analyticity domain of some modified L -series, *ProcLMS–2001*, p. 125–127 (in Lithuanian).
102. **E. Stankus**, On teaching probability theory, *ProcLMS–2001*, p. 394–396 (in Lithuanian).

103. **D. Sūdžiūtė**, Nash equilibria in the context of convex sets, *ProcLMS–2001*, p. 552–559 (in Lithuanian).
104. **D. Šiaučiūnas**, On the mean square for the periodic zeta-function on the critical line, *ProcLMS–2001*, p. 128–133.
105. **J. Šiaulys**, On the logarithmic frequency of the values of additive functions, *ProcLMS–2001*, p. 134–139.
106. **V. Zacharovas**, Cesaro sums and multiplicative functions on permutations, *ProcLMS–2001*, p. 140–148 (in Russian).

Articles: Other journals and proceedings

107. **A. Adamonis**, Software maintenance process in the large scale project, *Proc. Conf. Information Technology'2001*, Technologija, Kaunas, 2001, p. 325–330.
108. **A. Bastys**, J. Blužas, Sv. Kaminskienė, G. Urbonavičienė, A. Matiukas, M. Tamošiūnaitė, and J. R. Vaišnys, Using SVD for detection of coronary artery stenosis from rest ECG, *Proc. Intern. Conf. Biomedical Engineering, Kaunas Univ. of Technology*, Technologija, Kaunas, 2001, p. 15–18.
109. **D. Čiuksys**, WYSIWYG problems in automated advertisement publishing system, *Proc. Conf. Information Technology'2001*, Technologija, Kaunas, 2001, p. 350–353.
110. **V. Čyras**, On software development export from Lithuania, *V East-European Conf. Advances in Databases and Information Systems, September 25–28, 2001, Vilnius, 2001*, 2, p. 41–44.
111. **S. Dapkūnas** and **A. Mitašiūnas**, South Dakota state diabetes monitoring system, *Proc. Conf. Information Technology 2001*, Technologija, Kaunas, 2001, p. 348–349.
112. **G. Daugiala** and **A. Šermokas**, Information system of Lithuanian Citizens registry, *Days of Computerman'2001*, Žara, 2001, p. 169–177.
113. **A. Dienys** and **S. Ragaišis**, Practical aspects of ISO 9000 implementation for software development organization, *Proc. Conf. Information Technology 2001*, Technologija, Kaunas, 2001, p. 321–324.
114. **A. Dubickas**, Codes and cryptography, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2001, 4, p. 27–41 (in Lithuanian).
115. **R. Kačinskaitė**, On the limit theorems for the Matsumoto zeta-function, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2001, 4, p. 47–53.
116. **P. Kasparaitis**, K. Ratkevičius, A. Rudžionis, and V. Rudžionis, The application of synthesis and recognition of Lithuanian language in the automation, *Automation and Control Technologies'2001*, Technologija, Kaunas, 2001, p. 13–18 (in Lithuanian).
117. **R. Kašuba**, Mathematics from null, *Proc. Conf. Mathematics and Mathematics Education'2001, Kaunas Univ. of Technology*, 2001, p. 35–40 (in Lithuanian).
118. **R. Kašuba**, What's a nice mathematical problem and what ought it be?, *Proc. Conf. XXXV, Annual Meeting of German Didactical Society Germany*, 2001, p. 340–343.
119. A. Kudžmienė and **R. Kudžma**, Are proofs needful in a secondary school?!, *Proc. Conf. Mathematics and Mathematics Education'2001, Kaunas Univ. of Technology*, 2001, p. 20–23 (in Lithuanian).

120. **A. Laurinčikas**, On value distribution of zeta-function associated with certain cusp forms, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2001, **4**, p. 54–60.
121. **A. Laurinčikas**, The Lerch zeta-function. II, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2001, **4**, p. 61–70.
122. **A. Laurinčikas**, Zeta-functions, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2001, **4**, p. 71–79.
123. **A. Mitašiūnas, S. Ragaišis, and V. Undzėnas**, Software acquisition process, *Proc. Conf. Information Technology'2001*, Technologija, Kaunas, 2001, p. 313–320.
124. **E. Stankus**, Numbers and expressions, equations and inequalities in a textbook for the 11th form of a secondary school, *Proc. Conf. Mathematics and Mathematics Education'2001, Kaunas Univ. of Technology*, 2001, p. 43–45 (in Lithuanian).
125. **A. Svirskas and J. Sakalauskaitė**, An approach for solving Java object persistence issues using RDBMS and other data sources, In: *V East-European Conf. ADBIS'2001, Professional Communications and Reports, September 25–28, 2001, Vilnius, Lithuania* (Eds. A. Čaplinskas and J. Eder), **2**, Technika, Vilnius, 2001, p. 71–87.
126. **R. Šleževičienė**, Joint limit theorems for the Riemann zeta-function, *Proc. Sci. Sem. Faculty of Physics and Mathematics, Šiauliai Univ.*, 2001, **4**, p. 96–103.

2002

Monographs

1. **A. Laurinčikas and R. Garunkštis**, The Lerch Zeta-Function, *Kluwer Academic Publishers*, Dordrecht, 2002, 197 p.

Articles: Journals with ISI Science Citation Index

1. J. Babu and **E. Manstavičius**, Limit processes with independent increments for the Ewens sampling formula, *Ann. Inst. Stat. Math.*, 2002, **54**(3), p. 607–620.
2. **V. Bagdonavičius**, L. Gerville-Reache, and M. Nikulin, Parametric inference for step-stress models, *IEEE Trans. Reliability*, 2002, **51**(1), p. 27–31.
3. **V. Bagdonavičius, A. Bikėlis, V. Kazakevičius**, and M. Nikulin, Non-parametric estimation from simultaneous degradation and failure time data, *CR Acad. Sc. Paris*, 2002, **335**, Serie I, p. 183–188.
4. A. D. Barbour and **V. Čekanavičius**, Total variation asymptotics for sums of independent integer random variables, *Ann. Probab.*, 2002, **30**(2), p. 509–545.
5. **R. Baronas, F. Ivanauskas**, and M. Sapagovas, Reliability of one-dimensional model of moisture diffusion in wood, *Informatica*, 2002, **13**(4), p. 405–416.
6. **R. Baronas and F. Ivanauskas**, The influence of wood specimen surface coating on moisture movement during drying, *Holzforschung*, 2002, **56**(5), p. 541–546.
7. **R. Baronas, F. Ivanauskas**, and J. Kulys, Modelling dynamics of amperometric biosensors in batch and flow injection analysis, *J. Math. Chemistry*, **32**(2), 2002, p. 225–237.

8. R. Baumgartner, **A. Janeliūnas**, **Š. Raudys**, and R. Somorjai, Comparison of two classification methodologies on a real-world biomedical problem, *Advances in Pattern Recognition, Lect. Notes Comp. Sc.*, 2002, **2396**, p. 433–442.
9. **M. Bloznelis**, A note on the multivariate local limit theorem, *Stat. Probab. Letters*, 2002, **59**, p. 227–233.
10. **M. Bloznelis** and F. Götze, An Edgeworth expansion for symmetric finite population statistics, *Ann. Probab.*, 2002, **30**(3), p. 1238–1265.
11. **M. Bloznelis** and H. Putter, Second order and bootstrap approximation to Student's t statistic, *Teor. Veroyatn. Primenen.*, 2002, **47**(2), p. 374–381.
12. **V. Čekanavičius**, On the convergence of Markov binomial to Poisson distribution, *Stat. Probab. Letters*, 2002, **58**, p. 83–91.
13. **A. Dubickas**, Mahler measures close to an integer, *Canadian Math. Bull.*, 2002, **45**(2), p. 196–203.
14. **A. Dubickas**, On numbers which are differences of two conjugates of an algebraic integer, *Bull. Australian Math. Soc.*, 2002, **65**(3), p. 439–447.
15. **A. Dubickas**, Integer parts of powers of Pisot and Salem numbers, *Archiv der Mathematik*, 2002, **79**(4), p. 252–257.
16. **A. Dubickas**, The Remak height for units, *Acta Mathematica Hungarica*, 2002, **97**(1–2), p. 1–13.
17. **A. Dubickas**, On the degree of a linear form in conjugates of an algebraic number, *Illinois J. Math.*, 2002, **46**(2), p. 571–585.
18. **A. Dubickas**, Some diophantine properties of the Mahler measure, *Math. Notes*, 2002, **72**(6), 2002, p. 763–767.
19. **A. Dubickas** and C. J. Smyth, Variations on the theme of Hilbert's Theorem 90, *Glasgow Math. J.*, 2002, **44**, p. 435–441.
20. **R. Garunkštis**, On some inequalities concerning $\pi(x)$, *Experimental Math.*, 2002, **11**(2), p. 297–301.
21. **F. Ivanauskas**, R. Gaška, M. S. Shur, **R. Vaicekauskas**, and A. Žukauskas, Optimization of white polychromatic semiconductor lamps, *Appl. Phys. Lett.*, 2002, **80**(2), p. 234–236.
22. **A. Janeliūnas** and **Š. Raudys**, Reduction of boasting bias of linear expert. Multiple Classification Systems, *Lect. Notes Comp. Sc.*, 2002, **2364**, p. 242–251.
23. **V. Kazakevičius** and **R. Leipus**, On stationarity in the $ARCH(\infty)$ model, *Econometric Th.*, 2002, **18**, p. 1–16.
24. **R. Krasauskas**, Toric surface patches, *Adv. Comp. Math.*, 2002, **17**, p. 89–113.
25. **A. Laurinčikas** and **R. Šleževičienė**, The universality of zeta-functions with multiplicative coefficients, *Integral Transforms and Special Functions*, 2002, **13**, p. 243–257.
26. **E. Manstavičius**, Mappings on decomposable combinatorial structures: analytic approach, *Combinatorics, Probab., Computing*, 2002, **11**, p. 61–78.
27. **R. Šleževičienė** and J. Steuding, On the zeros of the Estermann zeta-function, *Integral Transforms and Special Functions*, 2002, **13**, p. 363–371.

Articles: International reviewed journals and proceedings

28. **V. Bagdonavičius** and M. Nikulin, Regression analysis of AFT model in dynamic environments, *Proc. Intern. Symp. Business and Industrial Statistics, Yokohama, Japan, August 20–21, 2002*, p. 161–168.
29. **V. Bagdonavičius** and M. Nikulin, Goodness-of-fit for accelerated life models, In: *Goodness-of-fit Tests and Model Validity* (Eds. C. Huber-Carol, N. Balakrishnan, M. S. Nikulin, and M. Mesbah), Birkhauser, Boston, 2002, p. 281–297.
30. **V. Bagdonavičius**, M. Hafdi, and M. Nikulin, The generalized proportional hazards model and its application for statistical analysis of the Hsieh model, *Proc. II Euro-Japanese Workshop on Stochastic Risk Modelling for Finance, Insurance, Production and Reliability, September 18–20, Chamonix, France* (Eds. T. Dohi, N. Limnios, and S. Osaki), 2002, p. 42–53.
31. **V. Bagdonavičius**, M. Hafdi, F. Himdi, and M. Nikulin, Statistical analysis of the generalised linear proportional hazards model, *Zapiski Nauchnyx Seminarov POMI*, 2002, **294**, p. 5–18.
32. **V. Bagdonavičius**, **A. Bikėlis**, and **V. Kazakevičius**, Estimation of tire wear and traumatic failure intensities, *Tire Science and Technology*, 2002, **30**, p. 214–239.
33. **G. Bareikis**, Kubilius method in the polynomial semigroup, *Palanga–2001*, p. 1–10.
34. **R. Baronas** and **F. Ivanauskas**, Numerical investigation of moisture movement in porous solid using a diffusion model, *Proc. XV Nordic Sem. Computational Mechanics, October 18–19, 2002, Aalborg, Denmark* (Eds. E. Lund, N. Olhoff, and J. Stegmann), 2002, p. 11–16.
35. **A. Bastys**, A. Matiukas, S. Kaminskienė, G. Urbonavičienė, and K. Vostrugina, Prognosis of coronary artery stenosis based on rest ECG analysis, *Analysis of Biomedical Signals and Images: Proc. XVI Intern. Conf. Biosignal, 2002, June 26–28, Brno, Czech Republic*, Vutium Press, Brno, 2002, p. 100–102.
36. A. Dementjev, **F. Ivanauskas**, and **A. Kurtinaitis**, Modeling of compression dynamics and change of pulse quality during the type II second harmonic generation, *Proc. XV Belorussian–Lithuanian Sem. Lasers and Optical Nonlinearity, June 2002, Minsk, Belarus*, p. 74–82 (in Russian).
37. **A. Dubickas**, On the order of vanishing of polynomials, *Analysis*, 2002, **22**, p. 355–360.
38. **A. Dubickas**, Sequences with infinitely many composite numbers, *Palanga–2001*, p. 57–60.
39. **R. Eidukevičius**, I. Narkevičiūtė, O. Rudzevičienė, G. Levinienė, and K. Mociskienė, Management of Lithuanian children's acute diarrhoea with Gastrolit solution and disctahedral smectite, *Eur. J. Gastroenterol Hepatol*, 2002, **14**, p. 419–424.
40. **R. Garunkštis** and J. Steuding, On the zero distributions of Lerch zeta-functions, *Analysis*, 2002, **22**, p. 1–12.
41. **R. Garunkštis**, **A. Laurinčikas**, **R. Šleževičienė**, and J. Steuding, On the universality of Estermann zeta-functions, *Analysis*, 2002, **22**, p. 285–296.
42. **R. Garunkštis** and J. Steuding, Do Lerch zeta-functions satisfy the Lindelöf hypothesis?, *Palanga–2001*, p. 61–74.

43. **B. Grigelionis**, On generalized z -diffusions, In: *Stochastic Processes and Related Topics, Stochastic Monographs* (Eds. R. Buckdahn et al.), Taylor Francis, London and New-York, 2002, p. 155–169.
44. **J. Ignatavičiūtė**, Joint discrete value distribution of Lerch zeta-functions, *Palanga–2001*, p. 75–82.
45. **A. Juozapavičius** and **V. Rapševičius**, The structuring of textual data for data mining in geology, *Proc. VIII Annual Conf. Intern. Association for Mathematical Geology, September 15–20, 2002, Berlin, Germany*, Terra Nostra, 2002, **4**, p. 157–162.
46. **A. Kačėnas** and **D. Šiaučiūnas**, On the periodic zeta-function. III, *Palanga–2001*, p. 99–108.
47. **R. Kačinskaitė** and **A. Laurinčikas**, A joint discrete limit theorem for the Matsumoto zeta-function in the space of meromorphic functions, *Palanga–2001*, p. 109–118.
48. **K. Karčiauskas** and **R. Krasauskas**, Methods of algebraic geometry in free-form surface modeling, *Proc. East-West-Vision 2002, Intern. Workshop & Project Festival on Computer Vision, Computer Graphics, New Media, Austrian Computer Society* (Eds. F. Lebert and A. Ferko), 2002, p. 161–166.
49. **J. Kubilius**, On the remainder term in the limit theorems for additive arithmetical functions, *Bolyai Soc. Math. Studies. 11: Paul Erdős and His Mathematics. I* (Eds. G. Halász, L. Lovász, M. Simonovits, and V.T. Sós), Springer, Berlin, 2002, p. 355–362.
50. **A. Laurinčikas**, Application of probabilistic methods in the theory of the Riemann zeta-function, In: *IV Intern. Conf. Modern Problems of Number Theory and its Applications, September 10–15, Russia, Tula, 2001*, Topical problems, Part II, Moscow State University, Moscow, 2002, p. 98–116.
51. **A. Laurinčikas**, A probabilistic equivalent of the Lindelöf hypothesis, *Palanga–2001*, p. 157–161.
52. **A. Laurinčikas**, W. Schwarz, and J. Steuding, Value distribution of general Dirichlet series. III, *Palanga–2001*, p. 137–156.
53. **A. Laurinčikas**, Limit theorems for general Dirichlet series, *Th. Stoch. Processes*, 2002, **8**(24), No 3–4, p. 256–268.
54. **A. Mačiulis**, Some formulas for the moments of additive functions, *Palanga–2001*, p. 169–174.
55. **E. Manstavičius**, Functional limit theorems in probabilistic number theory, *Bolyai Soc. Math. Studies. 11: Paul Erdős and His Mathematics. I* (Eds. G. Halász, L. Lovász, M. Simonovits, and V.T. Sós), Springer, Berlin, 2002, p. 465–491.
56. **E. Manstavičius**, On the probability of combinatorial structures without some components, *Number Theory for the Millennium (Proc. Conf. Number Th., Urbana, IL, 2000)*, Vol. II, A. K. Peters, Natick, MA, 2002, p. 387–401.
57. **E. Manstavičius**, Functional limit theorem for sequences of mappings on the symmetric group, *Palanga–2001*, p. 175–187.
58. **G. Misevičius**, On large deviations in the theorem of Fortet–Kac for unbounded functions, *Palanga–2001*, p. 221–228.

59. **A. Račkauskas** and Ch. Suquet, Hölder convergences of multivariate empirical characteristic functions, *Math. Methods in Statist.*, 2002, **11**(3), p. 341–357.
60. **A. Račkauskas** and Ch. Suquet, On the Hölderian functional central limit theorem for the iid random elements in Banach spaces, *Proc. Conf. Limit Theorems in Probability and Statistics, Balatonlelle, 1999* (Eds. I. Berkes, E. Csaki, and M. Csorgo), Janos Bolyai Math. Soc., Budapest, 2002, **2**, p. 485–498.
61. **E. Stankus**, On the Euler function $\varphi(n)$ with n in arithmetical progressions, *Palanga–2001*, p. 265–271.
62. **G. Stepanauskas**, The mean values of multiplicative functions. V, *Palanga–2001*, p. 272–281.
63. **J. Šiaulys**, On the separation of distributions of additive functions, *Palanga–2001*, p. 297–302.
64. **R. Šleževičienė**, The joint universality for twists of Dirichlet series with multiplicative coefficients by characters, *Palanga–2001*, p. 303–319.
65. **V. Zacharovas**, The convergence rate in CLT for random variables on permutations, *Palanga–2001*, p. 329–338.

Articles: Lithuanian licensed journals and proceedings

66. **A. Adamonis**, User support and software maintenance process model: A case study, *Information Sciences*, 2002, **22**, p. 78–87.
67. **A. Adamonis**, Comparison of architectures of software process capability models, *Information Sciences*, 2002, **23**, p. 143–161.
68. **A. Apynis** and **E. Stankus**, Mathematics in economics and business study plans, *ProcLMS–2002*, p. 353–354 (in Lithuanian).
69. G. J. Babu and **E. Manstavičius**, Infinitely divisible limit processes for the Ewens sampling formula, *LMR*, 2002, **42**(3), p. 294–307 (in Russian) = *LMJ*, 2002, **42**(3), p. 232–242.
70. **R. Baronas**, J. Christensen, **F. Ivanauskas**, and J. Kulys, Computer simulation of amperometric biosensor response to mixtures of compounds, *NAMC*, 2002, **7**(2), p. 3–14.
71. A. G. Blaževič and **D. Sūdžiūtė**, A class of the Nash equilibrium in bimatrix games, *ProcLMS–2002*, p. 587–590.
72. **D. Celov**, **F. Ivanauskas**, and A. Piktturna, A mathematical model of the distribution of research funds of the Faculty of Mathematics and Informatics, *ProcLMS–2002*, p. 141–146 (in Lithuanian).
73. **V. Čekanavičius**, On approximation by the Poisson law, *ProcLMS–2002*, p. 686–690.
74. **J. Dabulytė** and **F. Ivanauskas**, The optimization of temperature regime in diode-pumped solid-state laser when applying cooling by water, *ProcLMS–2002*, p. 306–311.
75. **A. Dienys**, Quality data records management, *Information Sciences*, Vilnius, 2002, **21**, p. 115–121.
76. **A. Domarkas**, R. J. Rakauskas, and A. Pincevičius, Computer algebra and its applications, *ProcLMS–2002*, p. 13–20 (in Lithuanian).

77. **A. Domarkas**, R. J. Rakauskas, and S. Vošterienė, Investigation of a problem of the potential theory, *ProcLMS–2002*, p. 312–316 (in Lithuanian).
78. **A. Dubickas**, Polynomials with many roots on a circle, *ProcLMS–2002*, p. 44–46.
79. **R. Eidukevičius**, O. Rudzevičienė, and I. Narkevičiūtė, Lactose malabsorption and lactose intolerance in young children with atopic dermatitis, *Health Sciences*, 2002, 1(17), p. 6–10.
80. **R. Eidukevičius**, O. Rudzevičienė, and I. Narkevičiūtė, Laboratory diagnosis of hypolactosia, *Laboratory medicine*, 2002, 2(14), p. 16–19.
81. **R. Garunkštis**, On a positivity property of the Riemann ξ -function, *LMR*, 2002, 42(2), p. 179–184 = *LMJ*, 2002, 42(2), p. 140–145.
82. **R. Garunkštis**, On the zeros of the derivative of the Lerch zeta-function, *ProcLMS–2002*, p. 47–49 (in Lithuanian).
83. **P. Golokvosčius**, Stability of solutions of a class of differential equation systems, *ProcLMS–2002*, p. 165–168.
84. **J. Ignatavičiūtė**, On statistical properties of the Lerch zeta-function. II, *LMR*, 2002, 42(3), p. 343–361 (in Russian) = *LMJ*, 2002, 42(3), p. 270–285.
85. **J. Ignatavičiūtė**, On the influence of the arithmetical character of the parameters for the Lerch zeta-function, *ProcLMS–2002*, p. 51–54.
86. **F. Ivanauskas** and V. Pekarskas, Problems and perspectives of training applied mathematicians, *ProcLMS–2002*, p. 21–25 (in Lithuanian).
87. **F. Ivanauskas**, A. Pikturga, and **B. Lapcun**, Modeling the allocation of Vilnius University budget, *ProcLMS–2002*, p. 147–152 (in Lithuanian).
88. **F. Ivanauskas** and **R. Lapinskas**, On the spatial distribution and the spring return schedule of White Stork in Lithuania, *ProcLMS–2002*, p. 508–511.
89. **F. Ivanauskas**, **R. Lapinskas**, and V. Nedzinskis, The influence of the temperature to the spring arrival date of migrants, *ProcLMS–2002*, p. 512–517 (in Lithuanian).
90. **F. Ivanauskas** and **T. Meškauskas**, Initial boundary-value problems for derivative nonlinear Schrödinger equation. Justification of two-step algorithm, *NAMC*, 2002, 7(2), p. 69–103.
91. **R. Kačinskaitė**, A discrete limit theorem for the Matsumoto zeta-function in the space of meromorphic functions, *LMR*, 2002, 42(1), p. 46–67 (in Russian) = *LMJ*, 2002, 42(1), p. 37–53.
92. **A. Kavaliauskas**, Investigation of an immune system by qualitative methods, *ProcLMS–2002*, p. 651–655 (in Lithuanian).
93. A. Klimantavičienė, A. Valiulis, and **R. Lapinskas**, Lung function measurements in young children by the interruption technique, *Pediatric Pulmonology and Allergology*, 2002, 5(1–2), p. 1949–1656.
94. B. Kryžienė and **G. Misevičius**, On ergodic endomorphisms of four-dimensional torus, *ProcLMS–2002*, p. 59–62 (in Lithuanian).
95. **R. Lapinskas** and **R. Verikaitė**, One parametric fertility model, *ProcLMS–2002*, p. 548–553.
96. A. Laukaitis and **A. Račkauskas**, Functional data analysis of payment systems, *NAMC*, 2002, 7(2), p. 53–68.

97. A. Laukaitis and **A. Račkauskas**, Testing changes in Hilbert space autoregressive models, *LMR*, 2002, **42**(4), p. 434–447 (in Russian) = *LMJ*, 2002, **42**(4), p. 343–354.
98. **A. Laurinčikas** and J. Steuding, A joint limit theorem for general Dirichlet series, *LMR*, 2002, **42**(2), p. 205–217 (in Russian) = *LMJ*, 2002, **42**(2), p. 163–173.
99. **A. Laurinčikas**, On zeta-functions of finite Abelian groups, *LMR*, 2002, **42**(4), p. 448–458 (in Russian) = *LMJ*, 2002, **42**(4), p. 355–363.
100. **A. Laurinčikas**, A limit theorem for zeta-functions of normalized cusp forms, *ProcLMS–2002*, p. 63–69.
101. **A. Laurinčikas**, On the denseness in the space of analytic functions, *ProcLMS–2002*, p. 189–193.
102. **A. Laurinčikas**, Thirty years for the seminar of number theory, *ProcLMS–2002*, p. 402–404 (in Lithuanian).
103. **R. Leipus** and M.-C. Viano, Aggregation in ARCH models, *LMR*, 2002, **42**(1), p. 68–89 = *LMJ*, 2002, **42**(1), p. 54–70.
104. **A. Lenkšas**, Computer modeling of solutions to stochastic differential equations: weak approximations, *ProcLMS–2002*, p. 331–335.
105. **R. Levulienė**, Semiparametric estimates and goodness-of-fit tests for tire wear and failure time data, *NAMC*, 2002, **7**(1), p. 61–95.
106. R. Lileikytė and **J. Šiaulys**, Convergence of products of independent random variables to the log-Poisson law, *ProcLMS–2002*, p. 701–704.
107. **E. Manstavičius**, On permutations missing short cycles, *ProcLMS–2002*, p. 70–74.
108. **G. Misevičius**, A. Pincevičius, and R.-J. Rakauskas, The numerical simulation of military skills, *ProcLMS–2002*, p. 26–33.
109. **K. Navickis**, Intrinsic normalizations of a nonholonomic hypersurface with m -dimensional generators in the affine space A_n , *ProcLMS–2002*, p. 79–82 (in Russian).
110. **K. Navickis**, Geometry of a distribution of flags in an even-dimensional affine space, *ProcLMS–2002*, p. 83–86 (in Russian).
111. **S. Norgėla**, Decidability of a monadic subclass of modal logic S4, *ProcLMS–2002*, p. 471–476.
112. **S. Norgėla**, Decidability of some classes of modal logic, *LMR*, 2002, **42**(2), p. 218–229 (in Russian) = *LMJ*, 2002, **42**(2), p. 174–181.
113. **S. Norvidas**, Oscillation of functions with bounded spectral band, *LMR*, 2002, **42**(3), p. 326–375 (in Russian) = *LMJ*, 2002, **42**(3), p. 270–285.
114. **V. Paulauskas**, Some comments on deviation inequalities for infinitely divisible random vectors, *LMR*, 2002, **42**(4), p. 494–517 (in Russian) = *LMR*, 2002, **42**(4), p. 394–410.
115. **G. Puriuškis**, A system of Schrödinger equations with a nonhomogeneous nonlinear part, *ProcLMS–2002*, p. 202–206 (in Russian).
116. **G. Puriuškis**, On the blowing up of solutions to systems of Schrödinger equations, *LMR*, 2002, **42**(4), p. 518–526 (in Russian) = *LMJ*, 2002, **42**(4), p. 411–418.
117. **A. Račkauskas** and A. Tamulis, On uniform error of kernel estimate of discontinuous regression function, *ProcLMS–2002*, p. 565–570.

118. **V. Skakauskas**, A population dynamics model with parental care, *LMR*, 2002, **42**(1), p. 90–102 = *LMJ*, 2002, **42**(1), p. 71–80.
119. **E. Stankus**, On generalized Euler constants, *ProcLMS–2002*, p. 93–95 (in Lithuanian).
120. **D. Šiaučiūnas**, An approximate functional equation for the square of the periodic zeta-function, *ProcLMS–2002*, p. 96–100.
121. **J. Šiaulys**, The logarithmic frequency of values of additive functions, *LMR*, 2002, **42**(2), p. 257–264 (in Russian) = *LMJ*, 2002, **42**(2), p. 204–210.
122. **J. Šiaulys**, The distributions of additive functions with finite supports, *ProcLMS–2002*, p. 101–106.
123. **R. Šleževičienė**, A joint limit theorem for the Riemann zeta-function in the space of analytic functions, *LMR*, 2002, **42**(3), p. 390–398 (in Russian) = *LMJ*, 2002, **42**(3), p. 308–314.
124. **R. Šleževičienė**, On the zeros of the derivative of Dedekind eta-functions, *ProcLMS–2002*, p. 107–112.
125. **R. Šleževičienė**, On a joint limit distribution of the Riemann zeta-function in the space of analytic functions, *LMR*, 2002, **42**(4), p. 527–545 (in Russian) = *LMJ*, 2002, **42**(4), p. 419–434.
126. **R. Šleževičienė**, On some aspects in the theory of the Estermann zeta-function, *Proc. Sc. Sem. of Faculty of Physics and Mathematics, Šiauliai Univ.*, 2002, **5**, p. 115–130.
127. **V. Zacharovas**, The rate of convergence to normal law of certain variable defined on random polynomials, *LMR*, 2002, **42**(1), p. 113–138 (in Russian) = *LMJ*, 2002, **42**(1), p. 88–107.

Articles: Other journals and proceedings

128. **A. Apynis, E. Stankus**, and M. Strickienė, On supplementary mathematical education, *Proc. Conf. Mathematics and Mathematics Education-2002, Kaunas Univ. of Technology*, Kaunas, 2002, p. 13–17 (in Lithuanian).
129. **A. Dubickas**, Polynomials with many factors in cyclotomic extensions, *Proc. Sc. Sem. of Faculty of Physics and Mathematics, Šiauliai Univ.*, 2002, p. 16–22.
130. **A. Juozapavičius** and **V. Rapševičius**, The structuring of textual data for data mining in geology, Basin stratigraphy: modern methods and problems. *Proc. V Baltic Stratigraphical Conf., September 22–27, 2002, Vilnius Univ., Lithuania*, Vilnius, 2002, p. 167–171.
131. **P. Kasparaitis**, K. Ratkevičius, A. Rudžionis, and V. Rudžionis, Some examples of application of voice technology, *Proc. Conf. Information Technologies'2002, January 29–30, 2002, Kaunas*, p. 283–288 (in Lithuanian).
132. **R. Kašuba**, Can you find anything more simple than the block adding, multiplying, and dividing?, *Proc. Conf. Mathematics and Mathematics Education-2002, Kaunas Univ. of Technology*, Kaunas, 2002, p. 40–45 (in Lithuanian).
133. **R. Kašuba**, The mathematics from zero or at the beginning it was mainly the beauty and simplicity, *Proc. Conf. XXXVI Annual Meeting of German Didactical Society, Germany*, 2002, p. 259–262.

134. **R. Kudžma**, Exam: Oral or written?, *Proc. Conf. Mathematics and Mathematics Education-2002, Kaunas Univ. of Technology*, Kaunas, 2002, p. 18–22 (in Lithuanian).
135. **K. Lapin**, Preparation of technical drawings using methods of artificial intelligence, In: *Proc. Conf. Information Technology'2002, December 18, 2002*, Technologija, Kaunas, 2002, p. 201–205.
136. **A. Laurinčikas**, The conference “Theory of the Riemann zeta and allied functions” at Oberwolfach, *Proc. Sc. Sem. of Faculty of Physics and Mathematics, Šiauliai Univ.*, 2002, **5**, p. 39–44.
137. **A. Laurinčikas**, The Lerch zeta-function. III, *Proc. Sc. Sem. of Faculty of Physics and Mathematics, Šiauliai Univ.*, 2002, **5**, p. 45–57.
138. **A. Laurinčikas** and K. Matsumoto, The joint universality of zeta-functions attached to certain cusp forms, *Proc. Sc. Sem. of Faculty of Physics and Mathematics, Šiauliai Univ.*, 2002, **5**, p. 58–75.
139. **J. Šiaulys**, The convergence to the Poisson law in number theory, *Proc. Sc. Sem. of Faculty of Physics and Mathematics, Šiauliai Univ.*, 2002, **5**, p. 108–114.

2003

Articles: Journals with ISI Science Citation Index

1. **R. Baronas**, **F. Ivanauskas**, and J. Kulys, The influence of the enzyme membrane thickness on the response of amperometric biosensors, *Sensors*, 2003, **3**(7), p. 248–262.
2. **R. Baronas**, **F. Ivanauskas**, J. Kulys, and M. Sapagovas, Modelling of amperometric biosensors with rough surface of the enzyme membrane, *J. Math. Chemistry*, 2003, **34**(3–4), p. 227–242.
3. R. E. Blake and **A. Juozapavičius**, Convergent matching for model-based computer vision, *Pattern Recognition*, 2003, **36**(2), p. 527–534.
4. **M. Bloznelis**, An Egeworth expansion for Studentized finite population statistics, *Acta Appl. Mathem.*, 2003, **78**, p. 51–60.
5. **M. Bloznelis**, A note on the bias and consistency of the jackknife variance estimator in stratified samples, *Statistics*, 2003, **37**(6), p. 489–504.
6. **V. Čekanavičius**, Infinitely divisible approximations for discrete nonlattice variables, *Adv. Appl. Probab.*, 2003, **35**(4), p. 982–1006.
7. **V. Čekanavičius** and Y. H. Wang, Compound Poisson approximations for sums of discrete nonlattice variables, *Adv. Appl. Probab.*, 2003, **35**, p. 228–250.
8. **V. Čekanavičius**, Estimates of pseudomoments via the Stein–Chen method, *Acta Appl. Mathem.*, 2003, **78**, p. 61–71.
9. M. Dromota, M. Fuchs, and **E. Manstavičius**, Functional limit theorems for digital expansions, *Acta Mathem. Hungarica*, 2003, **98**(3), p. 175–201.
10. **A. Dubickas**, Asymptotic density of surds with stable height, *Acta Appl. Mathem.*, 2003, **78**, p. 99–102.
11. **A. Dubickas**, Additive relations with conjugate algebraic numbers, *Acta Arithmetica*, 2003, **107**(1), p. 35–43.

12. **A. Dubickas**, Polynomials irreducible by Eisenstein's criterion, *Applicable Algebra in Engineering, Communication and Computing*, 2003, **14**(2), p. 127–132.
13. **A. Dubickas**, On a height related to the *abc* conjecture, *Indian J. Pure Appl. Math.*, 2003, **34**(6), p. 853–857.
14. **R. Garunkštis, A. Laurinčikas**, and J. Steuding, An approximate functional equation for the Lerch zeta-function, *Matemat. Zametki*, 2003, **74**(4), p. 494–501 (in Russian) = *Math. Notes*, 2003, **74**(4), p. 469–476.
15. **R. Garunkštis, A. Laurinčikas**, and J. Steuding, On the mean square of Lerch zeta-functions, *Archiv der Mathematik*, 2003, **80**, p. 47–60.
16. L. Giraitis, P. Kokoszka, **R. Leipus**, and G. Teyssiere, On the power of *R/S*-type tests under contiguous and semi-long memory alternatives, *Acta Appl. Mathem.*, 2003, **78**, p. 285–299.
17. L. Giraitis, P. Kokoszka, **R. Leipus**, and G. Teyssiere, Rescaled variance and related tests for long memory in volatility and levels, *J. Econometrics*, 2003, bf112, p. 265–294.
18. **B. Grigelionis**, On point measures of ε -upcrossings for stationary diffusions, *Stat. Probab. Letters*, 2003, **61**, p. 403–410.
19. **B. Grigelionis**, On information processes in statistical experiments with distributed observations, *Acta Applicandae Mathematicae*, 2003, **78**, p. 155–163.
20. **B. Grigelionis and V. Mackevičius**, The finiteness of moments of a stochastic exponential, *Stat. Probab. Letters*, 2003, **64**(3), 243–248.
21. **V. Kazakevičius and R. Leipus**, A new theorem on the existence of invariant distributions with applications to ARCH processes, *J. Appl. Prob.*, 2003, **40**, p. 147–162.
22. **A. Laurinčikas**, The universality of zeta-functions, *Acta Appl. Mathem.*, 2003, **78**, p. 251–271.
23. **A. Laurinčikas**, K. Matsumoto, and J. Steuding, The universality of *L*-functions associated to newforms, *Izvestiya RAN., Ser. Mat.*, 2003, **67**(1), p. 83–98 (in Russian) = *Izvestiya: Mathematics*, 2003, **67**(1), p. 77–90.
24. **R. Leipus** and M.-C. Viano, Long memory and stochastic trend, *Stat. Probab. Letters*, 2003, **61**, p. 177–190.
25. **R. Leipus** and D. Surgailis, Random coefficient autoregression, regime switching and long memory, *Adv. Appl. Probab.*, 2003, **35**, No. 3, p. 737–754.
26. **V. Mackevičius**, The convergence rate of Euler scheme for SDEs with Lipschitz drift and constant diffusion, *Acta Appl. Mathem.*, 2003, **78**, 301–310.
27. **E. Manstavičius**, Value concentration of additive functions on random permutations, *Acta Appl. Mathem.*, 2003, **79**, p. 1–8.
28. **V. Paulauskas** and S. T. Rachev, Maximum likelihood estimators in regression models with infinite variance innovations, *Stat. Papers*, 2003, **44**, p. 47–65.
29. **V. Paulauskas**, A new estimator for tail index, *Acta Appl. Mathem.*, 2003, **79**, p. 55–67.
30. **A. Račkauskas** and Ch. Suquet, Invariance principle under self-normalization for nonidentically distributed random variables, *Acta Appl. Mathem.*, 2003, **79**, p. 83–103.

31. **G. Skersys**, The average dimension of the hull of cyclic codes, *Discr. Appl. Math.*, 2003, **128**, p. 275–292.
32. **J. Šiaulys**, Additive functions with asymptotically finite supports, *Acta Appl. Mathem.*, 2003, **79**, p. 129–135.

Articles: International reviewed journals and proceedings

33. **V. Bagdonavičius, A. Bikėlis, V. Kazakevičius**, and M. Nikulin, Estimation from simultaneous degradation and failure data, In: *Mathematical and Statistical Methods in Reliability (Eds. B. Linquist and K. A. Doksum)*, Series on Quality, Reliability and Engineering Statistics, World Scientific, 2003, **7**, p. 301–318.
34. **V. Bagdonavičius** and M. Nikulin, Semiparametric statistical analysis for aging and longevity, *Proc. Intern. Conf. Advances in Statistical Inferential Methods (ASIM)*, June 9–12, 2003, KIMER, Almaty, 2003, p. 17–30.
35. **V. Bagdonavičius**, A. Chebab, S. Winnock, P. Maurette, V. Nikulina, and M. Nikulin, Procalcitonin as positive predictive value of severity in acute pancreatitis, *Proc. Intern. Conf. Advances in Statistical Inferential Methods (ASIM)*, June 9–12, 2003, KIMER, Almaty, 2003, p. 296–300.
36. **G. Bareikis**, Beta distribution in the polynomial semigroup, *Annales Univ. Sci. Budapest, Sect. Comp.*, 2003, **22**, p. 35–48.
37. **R. Baronas, F. Ivanauskas**, and J. Kulys, Modelling amperometric biosensors with internal and external diffusion limitations, In: *Proc. XVI Nordic Sem. Computational Mechanics in combination with the Pal. G. Bergan Anniversary Seminar, October 16–18, 2003, Trondheim, Norway (Eds. K. M. Mathisen, T. Kvamsdal, and K. M. Okstad)*, 2003, p. 41–44.
38. **A. Bastys**. The Gibbs phenomenon bounds in wavelet approximations, *Image Processing*, 2003, **1** (Proc. Intern. Conf. Image Processing, 2003), p. 1017–1020.
39. V. Bentkus and **A. Dubickas**, Some isoperimetric inequalities and their application to problems on polynomials, *Analysis Mathematica*, 2003, **29**, p. 259–279.
40. M. H. Boehlen, **A. Juozapavičius**, E. Kondratas, A. Mažeika, and A. Struk, A triangular reconstruction of density surfaces, *Proc. III Intern. Workshop on Visual Data Mining, ICDM-2003, University of Technology, Sidney, Florida, US*, 2003, p. 45–57.
41. D. Cox, **R. Krasauskas**, and M. Mustata, Universal rational parametrizations and toric varieties, *Topics in Algebraic Geometry and Geometric Modeling, Contemporary Mathematics*, 2003, **334**, p. 241–265.
42. P. Drungilas and **A. Dubickas**, Multiplicative dependence of shifted algebraic numbers, *Colloquium Mathematicum*, 2003, **96**(1), p. 75–81.
43. **A. Dubickas** and C. J. Smyth, On metric heights, *Periodica Mathematica Hungarica*, 2003, **46**(2), p. 135–155.
44. **R. Garunkštis**, The effective universality theorem for the Riemann zeta-functions, In: *Proc. Session in Analytic Number Theory and Diophantine Equations, MPI–Bonn, January–June 2002 (Eds. D. R. Heath-Brown and B. Z. Moroz)*, Bonner Mathematische Schriften, 2003, **360**, p. 1–21.
45. **J. Ignatavičiūtė**, On statistic properties of the Lerch zeta-function, *Chebyshevskii Sb.*, 2003, **4**(3), p. 120–128.

46. **K. Karčiauskas**, Rational M -patsches and tensor-border patches, *Topics in Algebraic Geometry and Geometric Modeling, Contemporary Mathematics*, 2003, **334**, p. 101–128.
47. P. Kokoszka and **R. Leipus**, Detection and estimation of changes in regime, *Long-range Dependence: Theory and Applications*, 2003, p. 325–338.
48. **R. Krasauskas** and R. Goldman, Toric Bezier patches with depth, *Topics in Algebraic Geometry and Geometric Modeling, Contemporary Mathematics*, 2003, **334**, p. 65–91.
49. **R. Krasauskas** and W. Wang, Interference analysis of conics and quadrics, *Topics in Algebraic Geometry and Geometric Modeling, Contemporary Mathematics*, 2003, Vol. 334, p. 25–36.
50. **A. Laurinčikas**, W. Schwarz, and J. Steuding, The universality of general Dirichlet series, *Analysis*, 2003, **23**, p. 13–26.
51. **A. Laurinčikas**, The joint universality for general Dirichlet series, *Ann. Univ. Sci. Budapest, Sec. Comp.*, 2003, **22**, p. 235–251.
52. **A. Laurinčikas**, Probabilistic results for general Dirichlet series, *Chebyshevskii Sb.*, 2003, **4**(3), p. 129–143.
53. **A. Laurinčikas**, The Voronoï summation formulae, *Proc. Institute of Mathematics of National Acad. Sc. of Ukraine*, 2003, **48**, p. 89–111 (in Ukrainian).
54. **A. Laurinčikas** and **R. Macaitienė**, Discrete limit theorems for general Dirichlet series. I, *Chebyshevskii Sb.*, 2003, **4**(3), p. 171–181.
55. **A. Laurinčikas** and **D. Šiaučiūnas**, The mean-square of the periodic zeta-function near the critical line, *Chebyshevskii Sb.*, 2003, **4**(3), p. 144–155.
56. **E. Manstavičius** and R. Skrabutėnas, On analytic problems for additive arithmetical semigroups, *Annales Univ. Sci. Budapest., Sect. Computatorica*, 2003, **22**, p. 269–285.
57. **T. Meškauskas**, B. Kaulakys, M. Alaburda, and V. Gontis, Modeling and estimation of $1/f$ noise of the signals represented by pulses and by fluctuating amplitude, *Proc. XVII Intern. Conf. Noise and Fluctuations, August 18–22, 2003, Prague, Czech Republic* (Ed. J. Sikula), 2003, p. 679–682.
58. **V. Skakauskas**, A density-dependent population dynamics model with offspring production at fixed ages and child care, *Math. Modelling and Computing in Biology and Medicine 1: 5th ESMTB Conf., July 2–6, 2002, Milan*, 2003, p. 368–373.
59. **V. Stakėnas**, On the mean values of multiplicative functions over rational numbers, *Annales Univ. Sci. Budapest, Sect. Comp.*, 2003, **22**, p. 331–351.
60. **A. Račkauskas** and Ch. Suquet, On the Hölderian functional central limit theorem for i.i.d. random elements in Banach space, *Limit Theorems in Probability and Statistics II, Balatonlelle, June 28-July 2, 1999*, (Eds. I. Berkes, E. Csaki, and M. Csorgo), Janos Bolyai Math. Soc., Budapest, 2003, **2**, p. 485–498.

Articles: Lithuanian licensed journals and proceedings

61. **G. Alkauskas**, Generalization of the Rödseth–Gupta theorem on binary partitions, *LMR*, 2003, **43**(2), p. 123–132 (in Russian) = *LMJ*, 2003, **43**(2), p. 103–110.
62. **A. Ambrazevičius**, Solvability of a grain drying problem, *LMR*, 2003, **43**(2), p. 133–148 (in Russian) = *LMJ*, 2003, **43**(2), p. 111–124.
63. **V. Bagdonavičius**, **A. Bikėlis**, and **V. Kazakevičius**, Asymptotic distribution of a renewal function estimator, *ProcLMS–2003*, p. 457–463.
64. **G. Bareikis** and K.-H. Indlekofer, Arithmetical processes in the semigroups, *LMR*, 2003, **43**(4), p. 421–443 = *LMJ*, 2003, **43**(4), p. 347–366.
65. **G. Bareikis**, Selberg sieve in the polynomial semigroup, *ProcLMS–2003*, p. 23–28.
66. **R. Baronas**, **F. Ivanauskas**, and J. Kulys, Computer simulation of the response of amperometric biosensors in stirred and non stirred solution, *NAMC*, 2003, **8**(1), p. 3–18.
67. **R. Baronas**, **F. Ivanauskas**, J. Kulys, and M. Sapagovas, Modeling surface roughness of enzyme layer of amperometric biosensors, *ProcLMS–2003*, p. 625–629 (in Lithuanian).
68. **R. Baronas** and M. Plukas, Architectural solutions for data retrieval in long-term computer based document archive, *Information Sciences*, 2003, **26**, p. 187–192.
69. **A. Birštunas** and **S. Norgėla**, Inverse method for modal logic S4, *ProcLMS–2003*, p. 429–433.
70. **M. Bložnelis**, Edgeworth expansions for studentized versions of symmetric finite population statistics, *LMR*, 2003, **43**(3), p. 271–293 = *LMJ*, 2003, **43**(3), p. 221–240.
71. **D. Celov**, **F. Ivanauskas**, and A. Pikturna, Mathematical model of distribution of the research funds of Vilnius University (in Lithuanian), *Information Sciences*, 2003, **24**, p. 9–21 (in Lithuanian).
72. **J. Dabulytė** and **F. Ivanauskas**, Comparison of 2-D and 3-D diode-pumped solid-state laser cooling models, *NAMC*, 2003, **8**(1), p. 19–32.
73. **J. Dabulytė** and **F. Ivanauskas**, Optimization of the heating regime of white-light semiconductor generators, *ProcLMS–2003*, p. 613–618 (in Lithuanian).
74. **V. Dagienė**, Changes in the school-leaving exam in information technology, *ProcLMS–2003*, p. 93–95 (in Lithuanian).
75. **S. Dapkūnas**, On the course ‘Practical Informatics,’ *ProcLMS–2003*, p. 215–217 (in Lithuanian).
76. **A. Dubickas**, Relations with conjugate numbers over a finite field, *LMR*, 2003, **43**(2), p. 207–212 = *LMJ*, 2003, **43**(2), p. 172–175.
77. **E. Gaigalas**, On mixed-type parabolic forms, *ProcLMS–2003*, p. 29–31 (in Lithuanian).
78. **R. Garunkštis**, On the Chebyshev function $\psi(x)$, *LMR*, 2003, **43**(4), p. 487–496 (in Russian) = *LMJ*, 2003, **43**(4), p. 401–409.
79. **R. Garunkštis**, Approximation of the Hurwitz zeta-function by a finite sum, *ProcLMS–2003*, p. 32–34 (in Lithuanian).
80. J. Genys and **A. Laurinčikas**, Value distribution of general Dirichlet series. IV, *LMR*, 2003, **43**(3), p. 342–358 = *LMJ*, 2003, **43**(3), p. 281–294.

81. J. Genys and **A. Laurinčikas**, On joint limit theorem for general Dirichlet series, *NAMC*, 2003, **8**(2), p. 27–39.
82. **B. Grigelionis**, On the self-decomposability of Euler’s gamma function, *LMR*, 2003, **43**(3), p. 359–370 (in Russian) = *LMJ*, 2003, **43**(3), p. 295–305.
83. **F. Ivanauskas**, **A. Kurtinaitis**, and **R. Vaicekauskas**, FDVis: the interactive visualization and steering environment for the computational processes using the finite-difference method, *NAMC*, 2003, **8**(2), p. 3–14.
84. **F. Ivanauskas**, A. Kareiva, and **B. Lapcun**, Computer simulation of synthesis of yttrium aluminum garnet, *ProcLMS–2003*, p. 630–634 (in Lithuanian).
85. N. Jatulienė, G. Régalienė, J. Kalibatas, and **V. Kazakevičius**, Influence of risk factors in urban residential microenvironment on the prevalence of health problems among urban community, *Public Health*, 2003, **3**(22), p. 28–32.
86. **A. Javtokas**, Geometric zeta-function and Euclidean action, *NAMC*, 2003, **8**(2), p. 41–53.
87. **A. Juozapavičius** and J. Butkevičius, The methodology of modelling taxi rank service, *Transports*, 2003, **18**(4), p. 153–156.
88. **A. Kačėnas** and **D. Šiaučiūnas**, On the mean square of the periodic zeta-function, *ProcLMS–2003*, p. 45–50.
89. **P. Kasparaitis**, A. Rudžionis, K. Ratkevičius, and V. Rudžionis, Voice operated informative telecom services, *Electronics and Electrical Engineering*, 2003, **3**(45), p. 17–22.
90. **A. Kavaliauskas**, Analysis of one model of the immune system, *NAMC*, 2003, **8**(2), p. 55–63.
91. B. Kryžienė and **G. Misevičius**, On the uniform distribution of endomorphisms of s -dimensional torus, II, *ProcLMS–2003*, p. 56–59.
92. **A. Laurinčikas**, Zeta-functions of cusp forms, *ProcLMS–2003*, p. 60–64.
93. **A. Laurinčikas**, The geometry of numbers in Lithuania school of number theory, *ProcLMS–2003*, p. 361–364.
94. **A. Laurinčikas**, The support of one random element, *ProcLMS–2003*, p. 697–702.
95. **A. Laurinčikas** and J. Steuding, A short note on the Lindelöf hypothesis, *LMR*, 2003, **43**(1), p. 59–64 = *LMJ*, 2003, **43**(1), p. 51–55.
96. **A. Laurinčikas** and J. Steuding, The mean square of the Lerch zeta-function near the critical line, *LMR*, 2003, **43**(2), p. 213–226 = *LMJ*, 2003, **43**(2), p. 176–188.
97. **R. Leipus** and **R. Norvaiša**, Foundations of financial market theories, *Monetary Studies*, 2003, **4** (in Lithuanian).
98. **R. Macaitienė**, Weighted discrete limit theorems for general Dirichlet polynomials, *ProcLMS–2003*, p. 65–69.
99. **V. Maniušis** and **A. Račkauskas**, Convergence of the residual-based empirical characteristic functions, *ProcLMS–2003*, p. 525–531.
100. **E. Manstavičius**, Value concentration of additive functions on semigroups, *ProcLMS–2003*, p. 70–74.
101. **K. Navickis**, Geometry of nonholonomic complexes of a three-dimensional projective space, *ProcLMS–2003*, p. 171–174 (in Russian).

102. **K. Navickis**, Geometry of nonholonomic complexes $NGr(1, 4, 4)$, *ProcLMS–2003*, p. 175–178 (in Russian).
103. **S. Norgėla**, One calculus of nonderivable formulas of propositional modal logic, *LMR*, 2003, **43**(1), p. 65–79 (in Russian) = *LMJ*, 2003, **43**(1), p. 56–66.
104. **S. Norgėla**, Herbrand expansions of some formulas of modal logic S4, *ProcLMS–2003*, p. 434–437.
105. **V. Paulauskas** and **R. Zovė** On Hausdorff dimension of some random Cantor sets, *LMR*, 2003, **43**(2), p. 227–239 (in Russian) = *LMJ*, 2003, **43**(2), p. 189–198.
106. **V. Paulauskas** and **A. Skučaitė**, Some asymptotic results for one-sided large deviation probabilities, *LMR*, 2003, **43**(3), p. 384–395, (in Russian) = *LMJ*, 2003, **43**(3), p. 318–326.
107. **G. Puriuškis**, On the explosion of a solution of a nonlinear Schrödinger equation with small norm in the supercritical case, *ProcLMS–2003*, p. 153–155 (in Russian).
108. **A. Račkauskas** and Ch. Suquet, Hölderian invariance principle for triangular arrays of random variables, *LMR*, 2003, **43**(4), p. 513–532 (in French) = *LMJ*, 2003, **43**(4), p. 423–438.
109. **M. Radavičius**, Effect of nonresponse in Lithuanian travellers' survey, *ProcLMS–2003*, p. 548–553.
110. **V. Skakauskas**, O. Suboč, R. Čiegis, and T. Leonavičienė, Mathematical modeling of grain drying, *Math. Modeling and Analysis*, 2003, **8**(2), p. 103–112.
111. **G. Skersys**, On the concatenated structure of quasi-cyclic codes, *ProcLMS–2003*, 2003, p. 75–78.
112. **E. Stankus**, Terminology of mathematics: conventionality and correctness, *ProcLMS–2003*, p. 403–405.
113. **G. Stepanauskas** and **J. Šiaulys**, The local behaviour of some additive functions, *ProcLMS–2003*, p. 84–88.
114. **R. Vaicekauskas**, A. Žukauskas, K. Breivė, Z. Bliznikas, A. Novičkovas, P. Vitta, A. Navickas, R. Gaška, and M. S. Shur, Semiconductor lamp for phototherapy, *Electronics and Electrical Engineering*, 2003, **5**(47), p. 38–42 (in Lithuanian).
115. **V. Verikaitė**, Juozapas Damijonaitis and Lithuanian school, *ProcLMS–2003*, p. 410–414 (in Lithuanian).
116. **S. Zubė**, Correspondence and (2, 1)-Bezier surfaces, *LMR*, 2003, **43**(1), p. 99–122 = *LMJ*, 2003, **43**(1), p. 83–102.

Articles: Other journals and proceedings

117. **A. Apynis** and **E. Stankus**, Links between mathematics at secondary school and university, *Proc. Conf. Mathematics and Mathematics Education-2003, Kaunas Univ. of Technology*, Kaunas, 2003, p. 8–10 (in Lithuanian).
118. **M. Bložnelis**, Bias and consistency of jackknife variance estimator in stratified samples, *Workshop on Survey Sampling Theory and Methodology, May 28–June 3, 2003, Palanga, Lithuania*, Statistics Lithuania, Vilnius, 2003, p. 10–21.
119. **A. Dubickas**, The divisors of Newman polynomials, *ProcFPM*, 2003, **6**, p. 25–28.
120. **R. Garunkštis**, On the Voronin's universality theorem for the Riemann zeta-function, *ProcFPM*, 2003, **6**, p. 29–33.

121. **P. Kasparaitis**, T. Dumbliauskas, and A. Rudžionis, SAPI interface of Lithuanian text-to-speech system, *Proc. Annual Conf. ‘Automation and control technologies 2003’*, Kaunas, 2003, p. 45–48 (in Lithuanian).
122. **P. Kasparaitis**, A. Rudžionis, K. Ratkevičius, and V. Rudžionis, Relation of informative voice technologies with telecommunications and automatic control, *Proc. Annual Conf. ‘Automation and Control Technologies 2003’*, Kaunas, 2003, p. 49–54 (in Lithuanian).
123. **P. Kasparaitis**, A. Rudžionis, K. Ratkevičius, and V. Rudžionis, Voice based telecom services, *Proc. Conf. Information Technologies’2003, January 28–29, Kaunas*, 2003, p. 49–54 (in Lithuanian).
124. **R. Kašuba**, Numbers, numbers, simply huge numbers, *Proc. Conf. Mathematics and Mathematics Education-2003, Kaunas Univ. of Technology*, Kaunas, 2003, p. 21–26 (in Lithuanian).
125. **R. Kašuba**, Why is the proper mathematical education more and more precious, *Proc. XXXVII Annual Meeting of German Didactical Society*, 2003, p. 333–336.
126. B. Kryžienė and **G. Misevičius**, On the uniform distribution of endomorphisms of s -dimensional torus *ProcFPM*, 2003, **6**, p. 56–63.
127. **A. Laurinčikas**, On the mean value of multiplicative function attached to certain cusp forms, *ProcFPM*, 2003, **6**, p. 64–80.
128. **A. Mackevičiūtė (A. Elijo)**, Sample design issues in educational surveys, *Workshop on Survey Sampling Theory and Methodology, May 28–June 3, 2003, Palanga, Lithuania*, Statistics Lithuania, Vilnius, 2003, p. 107–109.
129. **G. Misevičius, J. Norkūnienė**, and J. A. Staškevičius, Investigation of the velocity of spread of mechanical oscillations in maximally oriented composites, *ProcFPM*, 2003, **6**, p. 81–86.
130. **F. Mišeikis** and L. Zabulytė, Econometric model of the gross domestic product, *Ekonomika*, VU, 2003, **64**(4), p.92–98.
131. **A. Račkauskas**, Statistics: past, present, and perspectives, *Lietuvos statistikos darbai*, 2003, p. 53–68 (in Lithuanian).
132. **J. Šiaulys**, Moment’s inequality for additive functions with rational argument, *ProcFPM*, 2003, **6**, p. 131–141.

2004

Articles: Journals with ISI Science Citation Index

1. **G. Alkauskas**, Dirichlet series associated with strongly q -multiplicative functions, *The Ramanujan J.*, 2004, **8**, p. 13–21.
2. **G. Alkauskas** and **A. Dubickas**, Prime and composite numbers as integer parts of powers, *Acta Math. Hungarica*, 2004, **105**(3), p. 249–256.
3. **V. Bagdonavičius**, **A. Bikelis**, and **V. Kazakevičius**, Statistical analysis of linear degradation and failure time data with multiple failure modes, *Lifetime Data Analysis*, 2004, **10**(1), p. 65–81.

4. **V. Bagdonavičius**, O. Cheminade, and M. Nikulin, Statistical planning and inference in accelerated life testing using the CHSS model, *J. Statist. Planning and Inference*, 2004, **126**(2), p. 535–551.
5. **V. Bagdonavičius**, M. A. Hafdi and M. Nikulin, Analysis of survival data with cross-effects of survival functions, *Biostatistics*, 2004, **5**(3), p. 415–425.
6. **V. Bagdonavičius, R. Levulienė**, and M. Nikulin, Tests dégalité contre l’alternative de croissement de deux fonctions de survie, *C.R. Mathématique*, 2004, **339**, Issue 6, p. 425–428. (ISSN 1631-073 X).
7. **V. Bagdonavičius, R. Levulienė**, O. Cheminade, and M. Nikulin, Tests for equality of survival distributions against non-location alternatives, *Lifetime Data Analysis*, 2004, **10**(4), p. 445–460.
8. **R. Baronas, F. Ivanauskas, R. Maslovskis**, and **P. Vaitkus**, An analysis of mixtures using amperometric biosensors and artificial neural networks, *J. Math. Chemistry*, 2004, **36**(3), p. 281–297.
9. **R. Baronas, F. Ivanauskas**, and J. Kulys, The effect of diffusion limitations on the response of amperometric biosensors with substrate cyclic conversion, *J. Math. Chemistry*, 2004, **35**(3), p. 199–213.
10. **R. Baronas** and **F. Ivanauskas**, Reducing spatial dimensionality in a model of moisture diffusion in a solid material, *Intern. J. Heat and Mass Transfer*, 2004, **47**(4), p. 699–705.
11. **R. Baronas**, J. Kulys, and **F. Ivanauskas**, Modelling amperometric enzyme electrode with substrate cyclic conversion, *Biosensors & Bioelectronics*, 2004, **19**(8), p. 915–922.
12. **R. Baronas**, J. Kulys, and **F. Ivanauskas**, Mathematical model of the biosensors acting in a trigger mode, *Sensors*, 2004, **4**(4), p. 20–36.
13. **R. Baronas, F. Ivanauskas**, and M. Sapagovas, Numerical investigation of the geometrical factor for simulating the drying of wood, *Mathematics in Industry: Progress in Industrial Mathematics at ECMI*, 2002, p. 95–100.
14. V. Bentkus and **V. Paulauskas**, Optimal error estimates in operator-norm approximations of semigroups, *Lett. Math. Physics*, 2004, **68**(3), p. 131–138.
15. N. Berry, **A. Dubickas**, N. D. Elkies, B. Poonen, and C. Smyth, The conjugate dimension of algebraic numbers, *Quarterly J. Math.*, 2004, **55**, p. 237–252.
16. **V. Čekanavičius**, On local estimates and the Stein method, *Bernoulli*, 2004, **10**(4), 2004, p. 665–683.
17. A. Dementjev, **F. Ivanauskas**, and **A. Kurtinaitis**, A study of polarization and beam quality changes in second-order processes, *J. Optics A: Pure and Applied Optics*, 2004, **6**(3), suppl. S, p. S105–S114.
18. **P. Drungilas** and **A. Dubickas**, On subfields of a field generated by two conjugate algebraic numbers, *Proc. Edinburgh Math. Soc.*, 2004, **47**(3), p. 119–123.
19. **A. Dubickas**, On numbers which are Mahler measures, *Monatshefte für Mathematik*, 2004, **141**, p. 119–126.
20. **A. Dubickas**, Mahler measures generate the largest possible groups, *Math. Res. Letters*, 2004, **11**, p. 279–283.

21. **A. Dubickas**, Large integer polynomials in several variables, *Rendiconti del Seminario Matematico dell'Università di Padova*, to appear.
22. **R. Eidukevičius**, O. Rudzevičienė, and I. Narkevičiūtė, Lactose malabsorption in young Lithuanian children with atopic dermatitis, *Acta Paediatrica*, 2004, **93**(4), p. 482–486.
23. **F. Ivanauskas, R. Vaicekauskas**, A. Žukauskas, et al., Quadrichromatic white solid-state lamp with digital feedback, *Proc. Intern. Soc. Optical Engineering*, 2004, **5187**, p. 185–198.
24. **F. Ivanauskas, R. Vaicekauskas**, A. Žukauskas, R. Gaška, and M. S. Shur, Stability of the quadrichromatic solid-state lamp, *Proc. X Internat. Symp. Science and Technology of Light Sources, Toulouse, France, July 18–22, 2004*, p. 399–400.
25. R. Kačinskaitė and **A. Laurinčikas**, On the value distribution of the Matsumoto zeta-function, *Acta Math. Hungarica*, 2004, **105**(4), p. 339–359.
26. **K. Karčiauskas**, Gaussian and mean curvatures of rational maps, *Computer Aided Geometric Design*, 2004, **21**, p. 417–419.
27. **K. Karčiauskas**, Jorg Peters, and U. Reif, Shape characterization of subdivision surfaces: Case studies, *Computer Aided Geometric Design*, 2004, **21**(6), p. 601–614.
28. **V. Kazakevičius, R. Leipus**, and M. C. Viano, Stability of random coefficient ARCH models and aggregation schemes, *J. Econometrics*, 2004, Vol.**120**, p. 139–158.
29. **A. Laurinčikas** and K. Matsumoto, The joint universality of twisted automorphic L -functions, *J. Math. Soc. Japan*, 2004, **56**(3), p. 923–939.
30. **V. Paulauskas**, On operator-norm approximation of some semigroups by quasi-sectorial operators, *J. Functional Analysis*, 2004, **207**(1), p. 58–67.
31. **A. Račkauskas** and C. Suquet, Necessary and sufficient condition for the functional central limit theorem in Hölder spaces, *J. Theoret. Probab.*, 2004, **17**(1), p. 221–243.
32. **A. Račkauskas** and C. Suquet, Hölder norm test statistics for epidemic change, *J. Stat. Planning and Inference*, 2004, **126**, p. 495–520.
33. **A. Račkauskas** and C. Suquet, Central limit theorems in Hölder topologies for Banach space valued random fields, *Teor. Veroyatn. Primen.*, 2004, Vol. **49**, p. 109–125.
34. **V. Skakauskas**, On the stability of separable solutions of a sexual age-structured population dynamics model, *Math. Biosciences*, 2004, **191**(1), p. 41–67.
35. **R. Vaicekauskas**, V. Viliūnas, R. Stanikūnas, A. Švėgžda, H. Vaitkevičius, Z. Bliznikas, K. Breivė, A. Novičkovas, G. Kurilčik, A. Žukauskas, R. Gaška, and M. S. Shur, Polychromatic solid-state lamp versus standard D65 illuminant: Colour changes of Munsell samples, *Proc. X Internat. Symp. Science and Technology of Light Sources, Toulouse, France, July 18–22, 2004*, p. 629–630.
36. **R. Vaicekauskas**, R. Stanikūnas, H. Vaitkevičius, A. Švėgžda, V. Viliūnas, Z. Bliznikas, K. Breivė, A. Novičkovas, G. Kurilčik, A. Žukauskas, R. Gaška, and M. S. Shur, Color perception under illumination by quadrichromatic solid-state lamp, *Proc. Internat. Soc. Optical Engineering*, 2004, **5530**, p. 347–353.
37. **S. Zubė**, Number systems, alpha-splines and refinement, *J. Computat. Appl. Math.*, 2004, **172**, p. 207–231.

Articles: International reviewed journals and proceedings

38. **V. Bagdonavičius** and M. Nikulin, Statistical modeling in survival analysis and its influence on the duration analysis, *Handbook of Statistics, 23, Advances in Survival Analysis*, Eds. N. Balakrishnan and C.R. Rao, Elsevier, 2004, p. 411–429.
39. **V. Bagdonavičius, A. Bikelis, V. Kazakevičius**, and M. Nikulin, Nonparametric estimation of the renewal characteristics from the non-renewal data, *Longevity, Aging, and Degradation* (Eds. V. Antonov, C. Huber, M. Nikulin, and V. Polischook), 1, St. Petersburg Polytechnical Univ. Press, 2004, p. 22–30.
40. **V. Bagdonavičius**, M. Nikulin, and O. Zdorova-Cheminade, Some recent results in statistical modeling for clinical trials in oncology, *Longevity, Aging and Degradation* (Eds. V. Antonov, C. Huber, M. Nikulin, and V. Polischook), 2, St. Petersburg Polytechnical Univ. Press, 2004, p. 309–311.
41. **V. Bagdonavičius** and M. Nikulin, Semiparametric analysis of degradation and failure time data with covariates, *Parametric and Semiparametric Models with Applications to Reliability, Survival analysis, and Quality of Life, Series: Statistics for industry and Technology* (Eds. M.S. Nikulin, N. Balakrishnan, M. Mesbah, N. Limnios), Birkhauser, 2004, p. 41–64.
42. **V. Bagdonavičius**, A. Chehab, S. Winnock, P. Maurette, V. Nikouline, and M. Nikulin, Procalcitonin as a positive predictive value of severity in adult pancreatitis, *Longevity, Aging and Degradation* (Eds. V. Antonov, C. Huber, M. Nikulin, and V. Polischook), 2, St. Petersburg Polytechnical Univ. Press, 2004, p. 52–55.
43. **V. Bagdonavičius**, A. Chehab, P. Maurette, M. Nikulin, B. Zaaimi, and S. Mofat, Analyse statistique de l'effet de l'anesthésie sur la mémoire chez les patients en gynécologie et endoscopie, *Longevity, Aging, and Degradation* (Eds. V. Antonov, C. Huber, M. Nikulin, and V. Polischook), 2, St. Petersburg Polytechnical Univ. Press, St. Petersburg, 2004, p. 314–316.
44. **R. Baronas, F. Ivanauskas, R. Maslovskis**, and **P. Vaitkus**, Neural networks for estimation of the pollution, *Proc. VII Internat. Conf. Computer data analysis and modeling: robustness and computer intensive methods, Minsk, September 6–10, 2004*, 2, p. 138–141.
45. **R. Baronas, F. Ivanauskas**, and J. Kulys, Modelling of biosensors based on a array of enzyme microreactors, *Proc. XVII Nordic Sem. Computat. Mechanics, October 15–16, 2004, Stockholm, Sweden*, 2004, p. 128–131.
46. **R. Baronas** and **F. Ivanauskas**, Modelling of moisture movement in wood during long term outdoor storage, *Proc. IV European Congr. Computat. Methods Appl. Sc. Engin., Jyvaskylä, Finland, 24–28 July, 2004*, 2004, 9 p.
47. **R. Baronas, F. Ivanauskas**, and J. Kulys, Mathematical modelling of amperometric enzyme electrodes with substrate cyclic conversion, *Proc. IV European Congr. Computat. Methods Appl. Sc. Engin., Jyvaskylä, Finland, 24–28 July, 2004*, 2004, 11 p.
48. **A. Bastys**, J. Blužas, L. Gargasas, et al., Computer analysis of cardiological for diagnosis of ischemic heart disease, *Cardiology*, 2004, 44(2), p. 8–10 (in Russian).

49. **M. Bloznelis**, On combinatorial Hoeffding decomposition and asymptotic normality of subgraph count statistics, In: *Mathematics and Computer science III. Algorithms, Trees, Combinatorics and Probabilities, Trends in Mathematics* (Eds. M. Drmota et al.), Birkhäuser-Verlag, Basel/Switzerland, 2004, p. 73–79.
50. **M. Bloznelis**, Normal approximation for stratified samples, *Proc. Workshop on Survey Sampling Theory and Methodology, June 18–22, 2004, Tartu*, p. 18–23.
51. **L. Būtėnas** and **A. Juozapavičius**, Building a web portal for Lithuanian transport information system: analysis, categorisation, representation and marketing of static and dynamic information, *Proc. Internat. Conf. Transport Means, October 28–29, 2004, Kaunas*, p. 168–171.
52. **A. Čivilis**, Design of a tracking engine for a truck-monitoring internet portal, *Proc. Internat. Conf. Transport Means, October 28–29, 2004, Kaunas*, p. 172–175.
53. **A. Čivilis**, S. Christian Jensen, J. Nenortaitė, et al., Efficient tracking of moving objects with precision guarantees, *First Ann. Internat. Conf. Mobile and Ubiquitous Systems: Networking and Services*, Boston, 2004, p. 164–174.
54. **A. Dubickas**, Nonreciprocal algebraic numbers of small measure, *Commentationes Mathematicae Universitatis Carolinae*, 2004, **45**(5), p. 693–697.
55. **A. Dubickas**, J. Steuding, The polynomial Pell equation, *Elemente der Mathematik*, 2004, **59**, p. 133–143.
56. **A. Dubickas**, Conjugate algebraic numbers near symmetrical set, *Algebra i analiz*, 2004, **16**(6), p. 123–127 (in Russian)=*St. Petersburg Math. J.*, 2004, **16**(6).
57. V. Garbaliauskienė and **A. Laurinčikas**, Discrete value-distribution of L -functions of elliptic curves, *Publ. Inst. Math.*, 2004, **76**(90), p. 65–71.
58. **E. Garška** and R. Giriūnienė, Electronic processes in acoustoresistive sensors, *Sensor Electronics and Microsystem Technologies*, 2004, **1**, p. 30–40.
59. L. Giraitis, **R. Leipus**, P. M. Robinson, and **D. Surgailis**, LARCH, Leverage, and Long Memory, *J. Financial Econometrics*, 2004, **2**(2), p. 177–210.
60. **R. Ivanauskaitė**, **A. Laurinčikas**, The lognormal distribution law for zeta-functions of certain cusp forms, *Chebyshevskii Sb.*, 2004, **5**(4), p. 144–154.
61. **K. Karčiauskas** and P. Jörg, Polynomial C2 spline surfaces guided by rational multi-sided patches, *Proc. Workshop Computational Methods for Algebraic Spline Surfaces (COMPASS), September 29–October 3, 2003, Kefermarkt, Austria*, Kefermarkt, 2004, p. 119–134.
62. **R. Kašuba**, One remark concerning shortness as the sister of talent and two words forward friendship in mathematics between Belarus and Lithuania, *Proc. Conf. Mathematical Education: Present and Perspective, February 17–19, 2004, Mogilev*, p. 10–11.
63. **R. Krasauskas** and **M. Kazakevičiūtė**, Universal rational parametrizations and spline curves on toric surfaces, *Proc. Workshop Computational Methods for Algebraic Spline Surfaces (COMPASS), September 29–October 3, 2003, Kefermarkt, Austria*, Kefermarkt, 2004, p. 213–232.
64. **R. Kudžma**, Inverse function. Which one?, *Proc. IV Intern. Conf. Teaching Mathematics: Retrospective and Perspectives, May 23–24, 2004, Tallinn*, p. 79–83.

65. **E. Kutka**, The model of a transport network and transport database implementation in an information system, *Proc. Internat. Conf. Transport Means 2004, October 28–29, 2004, Kaunas*, p. 72–75.
66. **A. Laurinčikas** and **R. Macaitienė**, Discrete limit theorems for general Dirichlet series.III, *Central European J. Math.*, 2004, **2**(3), p. 339–361.
67. **A. Laurinčikas** and J. Steuding, On zeta-functions associated to certain cusp forms. I, *Central European J. Math.*, 2004, **2**(1) p. 1–18.
68. **A. Laurinčikas** and J. Steuding, A note on moments of $\zeta'(1/2 + i\gamma)$, *Publ. Inst. Math.*, 2004, **76**(90), p. 57–63.
69. **A. Laurinčikas**, On moments of zeta-functions associated to certain cusp forms, *Chebyshevskii Sb.*, 2004, Vol. 5, **3**(11), p. 138–152.
70. **A. Laurinčikas**, On the Lindelöf hypothesis for the Hurwitz zeta-function, *Chebyshevskii Sb.*, 2004, **5**(4), p. 155–163.
71. **R. Macaitienė**, Probabilistic results for general Dirichlet series, *Chebyshevskii Sb.*, 2004, Vol. 5, **3**(11), p. 153–162.
72. **E. Manstavičius**, Iterated logarithm laws and the cycle lengths of a random permutation, In: *Trends in Mathematics, Mathematics and Computer Science III, Algorithms, Tress, Combinatorics and Probabilities* (Eds. M. Drmota et al.), Birkhäuser-Verlag, Basel/Switzerland, 2004, p. 39–47.
73. **E. Stankus**, Teaching of probability theory at secondary school in Lithuania, *Proc. Conf. Mathematical Education: Present and Perspective, February 17–19, 2004, Mogilev*, p. 38–40.
74. **V. Skakauskas**, Large time behavior in a density-dependent population dynamics problem with age structure and child care, *Math. Modelling Population Dynamics*, 2004, **63**, p. 243–258.

Articles: Lithuanian licensed journals and proceedings

75. O. Aleknavičienė, L. Grumadienė, A. Gurskas, P. Skirmantas, M. Strockis, and **V. Tumasonis**, Palemonas, a computer font for Lithuanian philology, *Informacijos mokslai*, 2004, **31**, p. 150–170 (in Lithuanian).
76. **A. Apynis**, **E. Stankus**, and J. Šinkūnas, Five years of Lithuanian School for Young Mathematicians, *ProcLMS–2004*, p. 401–404 (in Lithuanian).
77. **J. Artamonova** and **R. Leipus**, A multinomial model for the bond market, *LMR*, 2004, **44**(4), p. 413–428 (in Russian) = *LMJ*, 2004, **44**(4), p. 329–341.
78. **J. Artamonova** and **R. Leipus**, Bond market modelling using a trinomial tree, *ProcLMS–2004*, p. 597–602 (in Lithuanian).
79. **G. Bareikis**, Poisson distribution in the polynomial semigroup, *LMR*, 2004, **4**(4), p. 429–442 = *LMJ*, 2004, **4**(4), p. 342–353.
80. **R. Baronas**, **F. Ivanauskas**, J. Kulys, and M. Sapagovas, Computational modelling of a sensor based on a array of enzyme microreactors, *NAMC*, 2004, **9**(3), p. 203–218.
81. **R. Baronas**, **F. Ivanauskas**, **R. Maslovskis**, and **P. Vaitkus**, , *ProcLMS–2004*, p. 682–686 (in Lithuanian).

82. **A. Bastys**, J. Blužas, S. Kaminskienė, et al., New approach of vector ECG analysis for revealing coronary artery stenosis, *Electronics and Electrical Engineering*, 2004, **2**(51), p. 82–85.
83. **A. Bikėlis** and **J. Turkuvienė**, The fundamental Hajek lemma for finite vector samples, *ProcLMS–2004*, p. 802–804 (in Lithuanian).
84. **A. Bikėlis** and **J. Turkuvienė**, Analysis of quasi-lattice distributions of statistics from finite population data, *ProcLMS–2004*, **44**, p. 584–589 (in Lithuanian).
85. **V. Čekanavičius** and B. Roos, Two-parametric compound binomial approximations, *LMR*, 2004, **44**(4), p. 443–466 = *LMJ*, 2004, **44**(4), p. 354–373.
86. **J. Dabulytė**, **F. Ivanauskas**, **V. Skakauskas** and R. Barauskas, The structure modelling of material composed of the orthotropic crystals, *NAMC*, 2004, **9**(4), p. 297–306.
87. **J. Dabulytė**, **F. Ivanauskas**, and A. Žukauskas, Modeling of LED's disposition, *ProcLMS–2004*, p. 703–707 (in Lithuanian).
88. **V. Dagienė**, Mathematics in Olympiads in Informatics, *ProcLMS–2004*, p. 256–262 (in Lithuanian).
89. **S. Dapkūnas**, **M. Meilūnas**, R. Ptašekas, I. Zabulytė, et al., Environmental pathology of city inhabitants in Lithuania, *Ekologija*, **3**, 2004, p. 6–16 (in Lithuanian).
90. **A. Elijio**, Impact of home factors on students' reading achievements, *ProcLMS–2004*, p. 441–446.
91. V. Garbaliauskienė, R. Kačinskaitė, and **A. Laurinčikas**, The joint universality for L -functions of elliptic curves, *NAMC*, 2004, **9**(4), p. 331–348.
92. V. Garalienė, **E. Povilonis**, and A. Navalinskas, 5-brom-2,3-indolinone: its action on isometric contraction and transmembrane action potential duration in guinea-pig papillary muscles, *Acta Medica Lituanica*, 2004, **11**(2), p. 45–51.
93. **R. Garunkštis**, Approximation of the Lerch zeta-function, *LMR*, 2004, **44**(2), p. 176–180 = *LMJ*, 2004, **44**(2).
94. **R. Garunkštis**, Universality of Dirichlet L -functions with shifted characters, *ProcLMS–2004*, p. 48–50.
95. J. Genys and **A. Laurinčikas**, A joint limit theorem for general Dirichlet series, *LMR*, 2004, **44**(1), p. 23–43 (in Russian) = *LMJ*, 2004, **44**(1), p. 18–35.
96. J. Genys and **A. Laurinčikas**, Value distribution of general Dirichlet series. V, *LMR*, 2004, **44**(2), p. 181–195 (in Russian) = *LMJ*, 2004, **44**(2), p. 145–156.
97. **B. Grigelionis**, On the extreme value theory for stationary diffusions under power normalization, *LMR*, 2004, **44**(1), p. 44–56 (in Russian) = *LMJ*, 2004, **44**(1), p. 36–46.
98. **R. Ivanauskaitė**, On the mean value of coefficients of certain cusp forms, *ProcLMS–2004*, p. 56–62.
99. **F. Ivanauskas**, **R. Baronas**, J. Kulys, and M. Sapagovas, Modelling of an array of amperometric microbiosensors, *ProcLMS–2004*, p. 721–725 (in Lithuanian).
100. **F. Ivanauskas**, see [106]
101. **H. Jasiūnas** and **V. Verikaitė**, In memoriam of mathematicians of Vilnius University, *ProcLMS–2004*, p. 450–455 (in Lithuanian).

101. **M. Juodis**, Hölderian functional central limit theorem for linear processes, *ProcLMS–2004*, p. 812–816.
102. **A. Juozulynas**, The eigenvalues of very sparse random symmetric matrices, *LMR*, 2004, **44**(1), p. 57–67 = *LMJ*, 2004, **44**(1), p. 62–70.
103. **R. Kašuba**, Psychological aspects in solving of mathematical problems, *ProcLMS–2004*, p. 466–472 (in Lithuanian).
104. **M. Kazakevičiūtė** and **R. Krasauskas**, Spline curves on torus, *ProcLMS–2004*, p. 194–197.
105. **A. Klivečka**, Random coefficient GARCH(1,1) model with i.i.d. coefficients, *LMR*, 2004 **44**(4), p. 467–480 = *LMJ*, 2004 **44**(4), p. 374–385.
106. B. Kryžienė and **G. Misevičius**, Large deviations for endomorphisms of torus, *ProcLMS–2004*, p. 72–76.
107. **J. Kruopis** and A. Vaišvila, Sampling control splitting products into two flows, *Electronics and Electrical Engineering*, 2004, **7**(56), p. 49–54.
108. **J. Kubilius**, Activities of the Lithuanian Mathematical Society 2001–2004, *ProcLMS–2004*, p. 15–22 (in Lithuanian).
109. **A. Kurtinaitis** and **F. Ivanauskas**, Finite difference solution methods for a system of the nonlinear Schrödinger equations, *NAMC*, 2004, **9**(3), p. 247–258.
110. **K. Lapin**, A survey of teaching methods of human-computer interaction, *ProcLMS–2004*, **44**, p. 314–318 (in Lithuanian).
111. **K. Lapin**, The comparative analysis of the teaching of human-computer interaction, *Information Science: Research Papers*, 2004, **30**, p. 66–73 (in Lithuanian).
112. **A. Laurinčikas**, A joint limit theorem on the complex plane for general Dirichlet series, *LMR*, 2004, **44**(3), p. 283–291 (in Russian) = *LMJ*, 2004, **44**(3), p. 225–231.
113. **A. Laurinčikas**, On zeta-functions of cusp forms, *ProcLMS–2004*, p. 77–82.
114. **A. Laurinčikas**, Contribution of M. Maknys to number theory, *ProcLMS–2004*, p. 482–486 (in Lithuanian).
115. **A. Laurinčikas**, The definition of one complex-valued random variable, *ProcLMS–2004*, p. 829–833.
116. A.A. Laurutis and **D. Šiaučiūnas**, On the fourth moment of the periodic zeta-function, *ProcLMS–2004*, p. 101–105.
117. **A. Lenkšas**, Stochastic differential equations with bad coefficients: a short note on the weak approximations, *ProcLMS–2004*, p. 821–824.
118. **R. Macaitienė**, Discrete limit theorems for general Dirichlet series. II, *LMR*, 2004, **44**(1), p. 85–92 (in Russian) = *LMJ*, 2004, **44**(1), p. 71–77.
119. **R. Macaitienė**, Joint discrete limit theorems on the complex plane for general Dirichlet series, *LMR*, 2004, **44**(3), p. 292–306 (in Russian) = *LMJ*, 2004, **44**(3), p. 232–243.
120. **R. Macaitienė**, Discrete limit theorem for general Dirichlet series in the space of meromorphic function, *ProcLMS–2004*, p. 83–89.
121. **E. Manstavičius**, Harmonic Bernoulli strings and random permutations, *ProcLMS–2004*, p. 90–94.
122. **K. Navickis**, Geometry of semi-nonholonomic hypercomplexes $SNGr(1, 4, 5)$ in the four-dimensional projective space, *ProcLMS–2004*, p. 198–201 (in Russian).

123. **K. Navickis**, Geometry of nonholonomic complexes $NGr(1, 4, 4)$ in the four-dimensional affine space, *ProcLMS–2004*, p. 202–205 (in Russian).
124. **J. Navikas**, Runge–Kutta-type methods for solving two-dimensional stochastic differential equations, *ProcLMS–2004*, p. 834–838.
125. **S. Norgėla**, Resolution method for some class of formulas of modal logic $S4$, *ProcLMS–2004*, p. 521–524.
126. **S. Norgėla**, The resolution method for one class of formulas of the first-order modal logic $S4$, *LMR*, 2004, **44**(4), p. 481–492 (in Russian) = *LMJ*, 2004, **44**(4), p. 386–394.
127. **J. Norkūnienė**, The law of iterated logarithm for the Ewens sampling formula, *ProcLMS–2004*, p. 95–100.
128. **S. Norvidas**, Majorants and extreme points of unit balls in Bernstein spaces, *LMR*, 2004, **44**(1), p. 93–103 (in Russian) = *LMJ*, 2004, **44**(1), p. 78–84.
129. **V. Pažemys**, A limit theorem for partial weighted sums of regression residuals, *ProcLMS–2004*, p. 566–571.
130. **A. Plikusas** and D. Pumpūtis, Calibrated estimators of totals under different distance measures, *ProcLMS–2004*, p. 572–576.
131. **G. Puriuškis**, On the blow-up of periodic solutions to a system of nonlinear Schrödinger equations, *ProcLMS–2004*, p. 169–173 (in Russian).
132. **M. Radavičius** and S. Nagurnas, Estimation of car braking parameters, *ProcLMS–2004*, p. 577–583 (in Lithuanian).
133. **V. Skakauskas**, An age-structured population dynamics model with females' pregnancy and child care, *LMR*, 2004, **44**(3), p. 315–342 (in Russian) = *LMJ*, 2004, **44**(3) p. 251–271.
134. **V. Skakauskas**, Large time behavior in a population dynamics with offspring production at fixed ages, child care, and spatial dispersal, *LMR*, 2004, **44**(2), p. 225–246 (in Russian) = *LMJ*, 2004, **44**(2), p. 180–197.
135. **G. Skersys**, On quasi-cyclic codes and traces of codes, *ProcLMS–2004*, p. 111–114.
136. **A. Skučaitė**, Large deviations for sums of independent heavy-tailed random variables, *LMR*, 2004, **44**(2), p. 247–259, (in Russian) = *LMJ*, 2004, **44**(2), p. 198–208.
137. **V. Stakėnas**, On Farey fractions with small prime factors, *LMR*, 2004, **44**(3), p. 343–358 (in Russian) = *LMJ*, 2004, **44**(3), p. 272–284.
138. **E. Stankus**, Teaching probability theory and combinatorics at secondary schools, *ProcLMS–2004*, p. 35–41 (in Lithuanian).
139. **J. Šiaulys**, On the support of distributions of integer-valued additive functions, *LMR*, 2004, **44**(2), p. 260–271 (in Russian) = *LMJ*, 2004, **44**(2), p. 209–218.
140. **J. Šiaulys**, The Halász inequality for additive function with rational argument, *LMR*, 2004, **44**(2), p. 272–277 (in Russian) = *LMJ*, 2004, **44**(2), p. 219–223.
141. **J. Šiaulys**, Distribution of values of additive functions with respect to the logarithmic frequency, *LMR*, 2004, **44**(4), p. 546–557 (in Russian) = *LMJ*, 2004, **44**(4), p. 437–446.
142. **J. Šiaulys**, The distributions of sums of the prime indicators with respect to distinct frequencies, *ProcLMS–2004*, p. 106–110.

143. **V. Zacharovas**, Distribution of the logarithm of the order of a random permutation, *LMR*, 2004, **44**(3), p. 372–406 (in Russian) = *LMJ*, 2004, **44**(3), p. 296–327.
144. **S. Zamarys**, The estimate of fractional moments for Dirichlet L -functions, *ProcLMS–2004*, p. 125–130.
145. **D. Zuokas**, Power analysis of dyadic increment (DI) statistic, *ProcLMS–2004*, p. 589–594.

Articles: Other journals and proceedings

146. **A. Apynis** and **E. Stankus**, Mathematics in curricula of economics, business, and studies management, *Proc. Conf. Mathematics and Mathematics Education–2004*, *Kaunas Univ. of Technology*, Kaunas, 2004, p. 14–16 (in Lithuanian).
147. **A. Čivilis**, Structure of vehicle tracking and information portals as an LBS, *Proc. Conf. “Information Technologies 2004,”* *Kaunas Univ. of Technology*, Kaunas, 2004, p. 593–598.
148. **A. Dubickas** and C. J. Smyth, Problem 11123, *American Mathematical Monthly*, 2004, **111**(10), p. 9–16.
149. J. Dudaitė and **A. Elijio**, Relation of mathematics results with socioeducational environment, *Proc. Conf. Mathematics and Mathematics Education–2004*, *Kaunas Univ. of Technology*, Kaunas, 2004, p. 17–21 (in Lithuanian).
150. J. Dudaitė and **A. Elijio**, Mathematics results of the Lithuanian basic school students, *Proc. Conf. Mathematics and Mathematics Education–2004*, *Kaunas Univ. of Technology*, Kaunas, 2004, p. 22–26 (in Lithuanian).
151. **R. Eidukevičius**, I. Narkevičiūtė, O. Rudzevičienė, G. Levinienė, and K. Mociškienė, Management of Lithuanian children’s acute diarrhoea with Gastrolit solution and Dicatohedral Smectite, *Pediatrija*, 2004, **1**(9), p. 88–96 (in Lithuanian).
152. **R. Kašuba**, Wie kann man die mathematische Beschäftigungen wirklich anziehend gestalten?, *Proc. Conf. XXXVIII Ann. Meeting German Didactical Soc.*, 2004, p. 333–336.
153. **J. Kruopis** and A. Vaišvila, Efficiency of control systems, *Proc. XIII Conf. of AB Ekranas*, 2004, p. 47–55.
154. **R. Kudžma**, Difficulties learning the notion of absolute value, *Proc. Conf. Mathematics and Mathematics Education–2004*, *Kaunas Univ. of Technology*, Kaunas, 2004, p. 27–29 (in Lithuanian).
155. **A. Laurinčikas**, The joint universality for general Dirichlet series, *ProcFPM*, 2004, **7**, p. 33–44.
156. **A. Laurinčikas**, A survey on limit theorems for general Dirichlet series, *ProcFPM*, 2004, **7**, p. 45–56.
157. **R. Leipus** and **R. Norvaiša**, Application of financial market theories, *Monetary Studies*, 2004, **1**, p. 31–53 (in Lithuanian).
158. **J. Šiaulys**, On limit distributions of integer-valued additive functions, *ProcFPM*, 2004, **6**, p. 130–114.

Submitted for publication in 2004 (not appeared in 2005)

1. G. J. Babu, **E. Manstavičius**, and **V. Zacharovas**, Limiting processes with dependent increments for measures on symmetric group of permutations, *Advanced Studies in Pure Math.*, submitted.
2. **M. Bloznelis** and F. Götze, Edgeworth approximations for distributions of symmetric statistics, *AMS Proceedings*.
3. J. B. Dixon and **A. Dubickas**, The values of Mahler measures, *Mathematika*, to appear.
4. **A. Dubickas**, Mahler measures in a cubic field, *Czech. Math. J.*, to appear.
5. **A. Dubickas**, Arithmetical properties of powers of algebraic numbers, *Bull. London Math. Soc.*, to appear.
6. **A. Dubickas**, The conjugate dimension of a field extension, *J. Appl. Algebra & Discr. Struct.*, to appear.
7. **B. Grigelionis**, Extreme value theory using power normalization, *Trans. XXIV Internat. Sem. Stability Problems for Stochastic Models*, to appear.
8. **B. Grigelionis**, On Polya mixtures of multivariate Gaussian distributions, *Stat. Probab. Letters*, to appear.
9. **A. Juozapavičius**, M. Boehlen, E. Kondratas, A. Mažeika, and A. Struk, A DS surface reconstruction, *Lect. Notes Artificial Intelligence*, 17 p, to appear.
10. **R. Leipus**, **V. Paulauskas**, and **D. Surgailis**, Random coefficient AR(1) process with heavy tailed renewal switching coefficient and heavy tailed noise, *J. Appl. Probab.*
11. **A. Mačiulis** and **J. Šiaulys**, On the limit laws of distributions of additive functions, *Ramanujan J.*
12. **E. Manstavičius**, On the random mapping statistics, In: *Proc. Conf. ELAZ 2004*, to appear.
13. **E. Manstavičius**, Asymptotic value distribution of additive functions defined on the symmetric group, *The Ramanujan J.*, submitted.
14. **S. Norvidas**, On exposed functions of unit balls in Bernstein spaces, *Arkiv der Matematik*, to appear.
15. **S. Norvidas**, A functional calculus for Hermitian elements and Bernstein's inequalities, *Funct. Anal. Appl.*, to appear.
16. **M. Pelanis**, S. Šaltenis, and Ch. S. Jensen, Indexing the past, present and anticipated future positions of moving objects, *ACM Trans. Database Systems*, 18 p.
17. **A. Račkauskas**, Hölderian properties of partial sums of regression residuals, *Metrika*.
18. **A. Račkauskas** and Ch. Suquet, Testing epidemic changes of infinite dimensional parameters, *Stat. Inf. Stoch. Processes*.
19. **G. Stepanauskas** and **J. Šiaulys**, The factorial moments of additive function with rational argument, *j. Australian Math. Society*.
20. **R. Vaicekauskas**, A. Žukauskas, K. Breivė, Z. Bliznikas, G. Kurilčik, A. Novičkovas, R. Gaška, and M. S. Shur, Semiconductor computer controlled quadrichromatic lamp for general lighting, *Elektronika ir elektrotechnika* (Kaunas).
21. **V. Zacharovas**, Voronoï summation formula and multiplicative functions on permutations, *Diskretnaya Matematika*.

NAME INDEX

(staff only)

- A. Adamonis 9, 21, 45, 60, 65
G. Alkauskas (student) 73, 76
A. Ambrazevičius 6, 73
T. Anbinderis 11
A. Apynis 10, 21, 25, 32, 34, 39, 40,
50, 53, 65, 68, 75, 81, 85
J. Artamonova 21, 32, 81
V. Bagdonavičius 8, 17, 19, 25, 28, 34,
38, 40, 43, 47, 49, 54, 55, 57, 61,
63, 71, 73, 76, 77, 79
G. Bakštys 5
G. Bareikis 15, 32, 39, 50, 57, 63, 71,
73, 81
R. Baronas 13, 16, 19, 21, 25, 28, 32,
34, 36, 39, 42, 47, 49, 50, 54, 55,
57, 61, 63, 65, 69, 71, 73, 77, 79,
81, 82
A. Bastys 11, 21, 26, 34, 48, 50, 55,
57, 60, 63, 71, 79, 82
A. Bikėlis 8, 17, 22, 25, 28, 34, 57, 61,
63, 71, 73, 76, 79, 82
A. Biržtunas 9, 22, 73
M. Bloznelis 15, 17, 26, 30, 32, 35, 39,
42, 43, 48–50, 54, 57, 62, 69, 73,
75, 80, 86
L. Būtėnas 11, 19, 43, 80
V. Čekanavičius 14, 22, 32, 40, 48, 51,
57, 61, 62, 65, 69, 77, 82
D. Celov 14, 17, 43, 65, 73
R. Čiegis 48, 49, 51, 55, 57
A. Čiginas (student) 26, 30
V. Čiočys 8
D. Čiuksys 13, 45, 49, 55, 60
A. Čivilis 11, 17, 20, 26, 43, 80, 85
V. Čyras 13, 22, 35, 39, 49, 60
J. Dabulytė 22, 35, 55, 65, 73, 82
J. Dabulytė-Bagdonavičienė 11, 16, 32
V. Dagienė 10, 22, 26, 32, 35, 51, 73,
82
S. Dapkūnas 13, 22, 35, 42, 45, 53, 57,
60, 73, 82
G. Daugiala 60
V. Daukšas 6
J. Degutis 6
V. Dičiūnas 9, 39, 42, 51, 57
A. Dienys 60, 65
A. Domarkas 6, 57, 65, 66
S. Dranickaitė 14
P. Drungilas 7, 45, 77
A. Dubickas 7, 18, 20, 28, 30, 32,
35, 39, 41, 43, 45, 47–49, 51, 54,
55, 58, 60, 62, 63, 66, 68–71, 73,
75–78, 80, 85, 86
R. Eidukevičius 8, 18, 32, 39, 51, 63,
66, 78, 85
A. Elijio 14, 22, 26, 28, 32, 35, 40, 76,
82, 85
K. Gadeikis 5, 22, 32
E. Gaigalas 10, 39, 73
V. Garbaliauskienė 16, 31
E. Garška 11, 80
R. Garunkštis 7, 18, 20, 22, 28, 31, 35,
45, 48, 51, 58, 61–63, 66, 70, 71,
73, 75, 82
J. Genys 16
P. Golokvosčius 66
B. Grigelionis 8, 31, 58, 64, 70, 74, 82,
86
R. Grigutis 15, 39
J. Ignatavičiūtė 11, 53, 58, 64, 66, 71
R. Ivanauskaitė 7, 20, 22, 31, 33, 36,
45, 80, 82
F. Ivanauskas 5, 11, 16, 18, 19, 21–23,
25, 28, 32–36, 38, 42, 43, 45, 47,
49, 50, 54–58, 61–63, 65, 66, 69,
71, 73, 74, 77–79, 81–83
A. Janeliūnas 9, 56, 62
H. Jasiūnas 7, 33, 36, 40, 82
A. Javtokas 7, 23, 33, 74
M. Juodis 14, 23, 29, 33, 83
A. Juozapavičius 11, 19–21, 26, 29, 42,
43, 45, 46, 49, 50, 56, 58, 64, 68,
69, 71, 74, 80, 86
A. Juozulynas 5, 48, 54, 58, 83
A. Kačėnas 7, 23, 45, 51, 58, 64, 74
R. Kačinskaitė 51, 53, 58, 60, 64, 66
J. Karaliūnaitė 26
K. Karčiauskas 11, 29, 36, 50, 51, 56,
64, 72, 78, 80
D. Kašliakovas 11
P. Kasparaitis 11, 18, 26, 39, 51, 58,
60, 68, 74, 76
R. Kašuba 10, 26, 36, 39, 40, 58, 60,
68, 76, 80, 83, 85
P. Katauskis 6, 33, 36, 38
I. Kaunietis 11, 23, 33, 36
A. Kavaliauskas 6, 23, 33, 39, 58, 66,
74

- V. Kazakevičius 8, 17, 25, 28, 34, 39, 57, 61–63, 70, 71, 73, 74, 76, 78, 79
M. Kazakevičiūtė 11, 16, 23, 80, 83
A. Kisel 11
V. Kiško 39
A. Klivečka 5, 83
A. Kočetkov 11
J. Kranauskas 11
R. Krasauskas 12, 16, 29, 36, 37, 43, 44, 48, 50, 51, 56, 62, 64, 71, 72, 80, 83
J. Kruopis 8, 23, 33, 38, 48, 83, 85
J. Kubilius 7, 33, 40, 46, 56, 64, 83
R. Kudžma 10, 26, 27, 33, 35, 37, 39, 60, 69, 80, 85
A. Kurtinaitis 13, 57, 63, 74, 77, 83
E. Kutka 12, 20, 26, 44, 81
V. Kvedaras 14
B. Lapcun 12, 18, 28, 36, 66, 74
K. Lapin 13, 22, 37, 39, 42, 49, 53, 69, 83
R. Lapinskas 14, 23, 33, 36, 59, 66
R. Laucius 10, 22, 32, 37
A. Laurinčikas 7, 16, 18–20, 23, 26, 27, 29, 31, 37, 44, 45, 47, 48, 51–54, 56, 58, 59, 61–64, 67, 69, 70, 72–74, 76, 78, 80–83, 85
R. Leipus 14, 19, 21, 28–32, 41, 42, 44, 45, 48–50, 53, 54, 56, 62, 67, 70, 72, 74, 78, 80, 81, 85, 86
A. Lenkšas 5, 67, 83
R. Levulienė 9, 23, 33, 39, 55, 67, 77
K. Liubinskas 5
R. Macaitienė 7, 24, 27, 31, 33, 37, 45, 72, 74, 81, 83
A. Mačiulis 15, 24, 31, 33, 59, 64, 86
V. Mackevičius 5, 29, 33, 40, 48, 51, 55, 70
A. Maldeikienė 14, 40
V. Maniušis 14, 33, 59, 74
E. Manstavičius 8, 24, 29, 31, 37, 38, 41, 44, 46, 47, 52, 56, 59, 61, 62, 64, 65, 67, 69, 70, 72, 74, 81, 83, 86
H. Markšaitis 8, 52
I. Masiulaitytė 9
R. Maslovskis 9, 32, 77, 79, 81
M. Meilūnas 6, 57, 82
T. Meškauskas 12, 20, 36, 48, 50–52, 66, 72
K. Mickus 12
F. Mišeikis 14, 76
E. Misevičius 5
G. Misevičius 8, 23, 33, 52, 59, 64, 66, 67, 74, 76, 83
A. Mitašiūnas 9, 21, 22, 42, 44–46, 49, 53–55, 60, 61
G. Murauskas 14, 22, 32
S. Narkevičius 12, 40
I. Naujikas 13, 21, 45
K. Navickis 12, 24, 33, 52, 67, 74, 75, 83, 84
J. Navikas 5, 55, 84
S. Norgėla 9, 24, 42, 52, 59, 67, 73, 75, 84
J. Norkūnienė 8, 24, 33, 38, 76, 84
R. Norvaiša 14, 74, 85
S. Norvidas 5, 67, 84, 86
A. Novikas (student) 32
R. Paulauskas 9, 21
V. Paulauskas 6, 19, 20, 22, 29, 30, 33, 38, 41, 42, 44, 46, 48–50, 54, 55, 67, 70, 75, 77, 78, 86
V. Pažemys 84
M. Pelanis 12, 86
A. Petrov 6
K. Pileckas 6, 19, 44, 48, 50
A. Plikusas 6, 84
E. Povilonis 9, 50, 56, 82
M. Puida 12, 23
G. Puriuškis 6, 24, 33, 52, 59, 67, 75, 84
A. Račkauskas 14, 18, 19, 23, 24, 29, 33, 41, 42, 44, 48, 55, 56, 65–67, 70, 72, 74–76, 78, 86
M. Radavičius 14, 59, 75, 84
M. Radžiūnas 22
S. Ragaišis 13, 21, 22, 42, 44, 45, 49, 54, 55, 60, 61
A. Raguotis 12, 22, 32
V. Rapševičius 12, 64, 68
Š. Raudys 9, 19, 29, 56, 62
Š. Repšys 10, 12, 25, 33, 38
A. Risovas 12
J. Sakalauskaitė 57, 61
T. Sakalauskas 12
A. Šermokas 60
D. Šiaučiūnas 59, 60, 64, 68, 72, 74, 83
J. Šiaulys 8, 24–26, 28, 30–34, 38, 53, 59, 60, 65, 67–69, 71, 75, 76, 84–86

- V. Skakauskas 6, 19, 25, 33, 34, 36, 38, 50, 52, 59, 68, 72, 75, 78, 81, 82, 84
G. Skersys 9, 25, 40, 42, 52, 56, 71, 75, 84
A. Skučaitė 75, 84
R. Šleževičienė 53, 54, 59, 61–63, 65, 68
V. Stakėnas 15, 34, 40, 41, 53, 59, 72, 84
E. Stankus 10, 21, 27, 32, 38, 40–42, 50, 53, 59, 61, 65, 68, 75, 81, 84, 85
V. Starikovičius 48, 49, 51, 55, 57
G. Stepanauskas 15, 25, 32, 34, 38, 44, 65, 75, 86
O. Štikonienė 12
D. Sūdžiūtė 6, 34, 53, 58, 60, 65
A. Šukys 9
D. Surgailis 6, 19, 29, 31, 32, 45, 80, 86
A. Svirskas 9, 20, 21, 27, 30, 42–44, 57, 61
V. Tumasonis 10, 42–44, 46, 51, 81
J. Turkuvienė 9, 22, 27, 58, 82
V. Undzėnas 13, 42, 54, 61
R. Vaicekauskas 10, 17, 22, 42, 49, 51, 54, 62, 74, 75, 78, 86
M. Vaičiulis 9
P. Vaitkus 9, 21, 25, 29, 32, 33, 57, 77, 79, 81
M. Valužis 14
R. Verikaitė (student) 59, 66
V. Verikaitė 33, 36, 40, 41, 75, 82
V. Zacharovas 15, 21, 44, 60, 65, 68, 85, 86
J. Žagūnas 10
A. Zaikina 9, 25, 29, 32, 33
S. Zamarys 8, 19, 23, 34, 45, 85
V. Zemlyss 14, 24, 34
R. Zovė 6, 75
S. Zubė 12, 30, 39, 48, 75, 78
D. Zuokas 15, 24, 25, 34, 44, 46, 85

VILNIAUS UNIVERSITETAS
MATEMATIKOS IR INFORMATIKOS FAKULTETAS
VILNIUS UNIVERSITY
FACULTY OF MATHEMATICS AND INFORMATICS

Research and Publications Report 2005
Mokslinis darbas ir publikacijos 2005 m.

Redaktorius V. Mackevičius

Anglų kalba

2006 02 14. 3,9 leidyb. apsk. 1. Rinko ir maketavo
D. Jonutienė. VU Matematikos ir informatikos fakultetas,
Naugarduko 24, 03225 Vilnius. Nemokamai.