

VILNIAUS UNIVERSITETAS
MATEMATIKOS IR INFORMATIKOS FAKULTETAS



VILNIUS UNIVERSITY
FACULTY OF MATHEMATICS AND INFORMATICS

Publications Report

Year 2012



Vilnius
2013

CONTENTS

Faculty of Mathematics and Informatics	1
Department of Computer Science	1
Department of Computer Science II	2
Department of Didactics of Mathematics and Informatics	4
Department of Differential Equations and Numerical Analysis	5
Department of Econometric Analysis	6
Department of Mathematical Analysis	7
Department of Mathematical Computer Science	8
Department of Mathematical Statistics	9
Department of Probability Theory and Number Theory	10
Department of Software Engineering	11
Doctoral Dissertations	12
Publications	13
Monographs	13
Articles included in Thomson Reuters Science Citation Index	13
Articles included in Thomson Reuters Conference Proceedings Citation Index	19
Articles in group A journals	21
Articles in group B journals	23
Textbooks	25
Books and lecture notes	26
Conference reports	27
Research grants and awards	34
Scientific contacts	35
Participation in international projects	35
Research visits	35
Foreign visitors	37
Name index	38
Number of articles included in Science Citation Index	40
Number of publications in 2012 by department	40

FACULTY OF MATHEMATICS AND INFORMATICS

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

Dean Prof. Gediminas Stepanauskas

Phone: +370 5 219 3050 Fax: +370 5 215 1585

gediminas.stepanauskas@mif.vu.lt

DEPARTMENT OF COMPUTER SCIENCE

<http://mif.vu.lt/lt2/struktura/inf>

Head Prof. Rimantas Vaicekuskas

Phone: +370 5 219 3073

rimantas.vaicekuskas@mif.vu.lt

The department supervises the education in informatics for the students in bachelor, master, and doctor programs. Research areas: neural networks, software process, semantics of programs, artificial intelligence, retrieval of logical proofs, error-correcting codes, service oriented frameworks and cloud computing, national language support, numerical modelling and visualization.

Julius Andrikonis. Modal logics.	julius.andrikonis@mif.vu.lt
Adomas Birštunas. Multiagent modal logics.	adomas.birstunas@mif.vu.lt
Valdas Dičiūnas. Pattern recognition, neural networks, algorithm complexity.	valdas.diciunas@mif.vu.lt
Arūnas Janeliūnas. Neural net based classification algorithms, object-oriented database systems.	arunas.janeliunas@mif.vu.lt
Vytautas Jančauskas. Optimization, swarm intelligence.	vytautas.jancauskas@mif.vu.lt
Rimantas Kybartas. Cloud computing.	rimantas.kybartas@mif.vu.lt
Ieva Mitašiūnaitė-Besson. Data mining, bioinformatics.	ieva.mitasiunaite@bti.vu.lt
Antanas Mitašiūnas. Process capability assessment and improvement, qualified electronic signature applications.	antanas.mitasiunas@mif.vu.lt
Stanislovas Leonas Norgėla. Automated theorem proving.	stasys.norgela@mif.vu.lt
Irmantas Radavičius. Graph theory, data structures and algorithms, algorithm analysis.	irmantas.radavicius@mif.vu.lt
Aistis Raudys. Machine learning, pattern recognition, trading systems, financial data analysis, time series.	aistis.raudys@mif.vu.lt
Šarūnas Raudys. Statistical and neural classifiers, machine learning, multiagent systems, data mining.	sarunas.raudys@mif.vu.lt
Gintaras Skersys. Error-correcting codes.	gintaras.skersys@mif.vu.lt

Arūnas Stočkus. Electronic signatures, mobile computing, web technologies, web services, data transfer technologies. `arunas.stockus@mif.vu.lt`

Vladas Tumasonis. Comparison of programming languages, computer algebra, IT standards. `vladas.tumasonis@mif.vu.lt`

Rimantas Vaicekuskas. Computational color science, parallel computing. `rimantas.vaicekuskas@mif.vu.lt`

Pranciškus Vitta. Optoelectronic materials and LED devices, intelligent solid-state illumination systems with optimized spectral power. `pranciskus.vitta@ff.vu.lt`

Jonas Žagūnas. Structured conversion of documents. `jonas.zagunas@mif.vu.lt`

Antanas Žilinskas. Optimization, optimal design, visualization of multidimensional data. `antanas.zilinskas@mii.vu.lt`

DOCTORAL STUDENTS

Karolis Koncevičius. Analysis of high-dimensional biomedical data, pattern recognition methods. `karolis.koncevicius@mii.vu.lt`

Andrius Paukštė. Modeling financial risks, multicore and cluster computing, GPU computing, Time series data mining. `andrius.paukste@mif.vu.lt`

Vytautas Valaitis. Artificial neural networks, multi-agent evolving systems. `vytautas.valaitis@mif.vu.lt`

DEPARTMENT OF COMPUTER SCIENCE II

<http://mif.vu.lt/lt2/struktura/komp>

Head Prof. Feliksas Ivanauskas

Phone: +370 5 219 3091

`feliksas.ivanauskas@mif.vu.lt`

The research areas at the department include methods and applications of nonlinear and computational modelling, computational geometry, methods of computer vision, 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.

Algirdas Bastys. Medical signal analysis, image recognition. `algirdas_bastys@yahoo.com`

Agnė Brilingaitė. Geo-context in location-based services, spatio-temporal databases, geographic information and intelligent transportation systems. `agne.brilingaite@mif.vu.lt`

Linus Bukauskas. Database support for visual data mining, indexing of visible objects, information retrieval spatio-temporal databases, ER modelling. `linas.bukauskas@mif.vu.lt`

Linus Būtėnas. Context extraction from semi-structural and textual information. `linas.butenas@mif.vu.lt`

Alminas Čivilis. Managing moving objects in location-based services, spatial data mining, big data and geographic information systems. `alminas.civilis@mif.vu.lt`

Jolita Ignatavičiūtė. Stochastic methods in image processing. `jolita.ignataviciute@mif.vu.lt`

Feliksas Ivanauskas. Numerical analysis of nonlinear diffusion equations, modelling physical problems. feliksas.ivanauskas@mif.vu.lt

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

Simonas Kareiva. Stereoscopy and stereometry, surface reconstruction, big data analytics, digital wireless communications. simonas.kareiva@ittc.vu.lt

Kęstutis Karčiauskas. Computer-aided geometric design, multisided rational surface patches. kestutis.karciauskas@mif.vu.lt

Pijus Kasparaitis. Speech synthesis. pijus.kasparaitis@mif.vu.lt

Rimvydas Krasauskas. Computer-aided geometric design, applications of algebraic geometry and topology. rimvydas.krasauskas@mif.vu.lt

Eduardas Kutka. Computer networks, virtualization technologies, distributed and GRID computing, network calculus. eduardas.kutka@mif.vu.lt

Tomas Gžegožas Lipnevičius. Computer vision and medical imaging. tomas.lipnevicius@mif.vu.lt

Ramūnas Markauskas. Computer vision in medical imaging. ramunas.markauskas@mif.vu.lt

Tadas Meškauskas. Numerical methods for partial differential models, mathematical and numerical modeling of electrochemical phenomena. tadas.meskauskas@mif.vu.lt

Kazimieras Mickus. Digital analysis of medical imaging. kazimieras.mickus@mif.vu.lt

Kazimieras Navickis. Intrinsic normalizations of distributions of flags on Grassmannians of affine spaces. kazimieras.navickis@mif.vu.lt

Aleksas Pikturna. Computer modelling of Universities budget. aleksas.pikturna@cr.vu.lt

Mantas Puida. Computer modelling of structural innovations in biosensors. mantas.puida@mif.vu.lt

Valdas Rapševičius. Computational high energy physics, ontology and rule-based expert systems, machine learning, medical imaging. valdas.rapsevicius@mif.vu.lt

Svajūnas Sajavičius. Numerical solution of PDEs with nonlocal conditions, finite-difference schemes, meshless methods. svajunas.sajavicius@mif.vu.lt

Jelena Tamulienė. Ab initio geometric and electronic structure computations on Grid or Cloud. jelena.tamuliene@tfai.vu.lt

Severinas Zubė. Algebraic geometry, curves and surfaces, computer-aided geometric design, subdivision, number theory. severinas.zube@mif.vu.lt

DEPARTMENT OF DIDACTICS OF MATHEMATICS AND INFORMATICS

<http://mif.vu.lt/lt2/struktura/mim>

Head Prof. Eugenijus Stankus
Phone: +370 5 219 3086
eugenijus.stankus@mif.vu.lt

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

Antanas Apynis. Game theory, social decisions, didactics of mathematics.

antanas.apynis@mif.vu.lt

Valentina Dagiėnė. Computer science, information technology, didactics of informatics, contests in informatics and information technology.

valentina.dagiene@mii.vu.lt

Aistė Elijio. Statistical educational surveys and their analysis, sample design issues, mathematically gifted students.

aiste.elijio@gmail.com

Edmundas Gaigalas. Quadratic forms, problems of mathematical education.

edmundas.gaigalas@mif.vu.lt

Tatjana Jevsikova. E-learning, ICT in education, software localization.

tatjana.jevsikova@mii.vu.lt

Romualdas Kašuba. Development of mathematical skill, modern elementary mathematics, mathematical contests, mathematics and arts.

romualdas.kasuba@mif.vu.lt

Ričardas Juozas Kudžma. Mathematical analysis, actuarial mathematics, didactics of mathematics, semiotics.

ricardas.kudzma@mif.vu.lt

Aivaras Novikas. Number theory, mathematical contests.

aivaras.novikas@mif.vu.lt

Šarūnas Repšys. Dynamic models of physiological structure of population.

sarunas.repsys1@mif.vu.lt

Eugenijus Stankus. Analytic number theory, probabilistic number theory, didactics of mathematics.

eugenijus.stankus@mif.vu.lt

DEPARTMENT OF DIFFERENTIAL EQUATIONS AND NUMERICAL ANALYSIS

<http://mif.vu.lt/lt2/struktura/dlsm>

Head Prof. Konstantinas Pileckas
Phone: +370 5 219 3084
konstantinas.pileckas@mif.vu.lt

Professors of the department give courses on differential equations (ODEs and PDEs), 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.

- Algirdas Ambrazevičius.** Solvability of partial differential equations of parabolic type.
algirdas.ambrazevicius@mif.vu.lt
- Vaclovas Daukšas.** Optimization methods.
vaclovas.dauksas@mif.vu.lt
- Aleksas Domarkas.** Solvability of nonlinear Schrödinger-type equations.
aleksas.domarkas@mif.vu.lt
- Romas Karaliūnas.** Mathematical modelling of problems for deformable body mechanics.
romas.karaliunas@mif.vu.lt
- Pranas Katauskis.** Numerical analysis of nonlinear partial differential equations of parabolic type.
pranas.katauskis@mif.vu.lt
- Algis Kavaliauskas.** Asymptotic analysis of dynamic systems.
algis.kavaliauskas@mif.vu.lt
- Neringa Klovienė.** Mathematical models of non-Newtonian fluids.
- Arvydas Kregždė.** Mathematical modelling of sovereign risk.
arvydas.kregzde@mif.vu.lt
- Mečislavas Meilūnas.** Numerical analysis of parabolic problems.
mecislavas.meilunas@mif.vu.lt
- Konstantinas Pileckas.** Elliptic differential equations, Navier–Stokes equations, asymptotical methods.
konstantinas.pileckas@mif.vu.lt
- Gintaras Puriuškis.** Schrödinger-type differential equations.
gintaras.puriuskis@mif.vu.lt
- Vladas Skakauskas.** Models of biopopulations and surface reactions.
vladas.skakauskas@mif.vu.lt
- Artūras Štikonas.** Nonlocal problems.
arturas.stikonas@mif.vu.lt
- Olga Štikonienė.** Numerical methods for nonlinear PDEs and problems with nonlocal boundary conditions.
olga.stikoniene@mif.vu.lt

DOCTORAL STUDENTS

- Alicija Eismontaitė.** Non-stationary methods of evolutionary equations.
alicija.eismontaite@mif.vu.lt
- Kristina Kaulakytė.** Mathematical models of viscous fluids.
kristina.kaulakyte@mif.vu.lt
- Jurij Novickij.** Finite difference schemes for hyperbolic equations with nonlocal conditions.
jurij.novickij@gmail.com
- Gailė Paukštaitė.** Generalized Green's functions.
gaile.paukstaite@mif.vu.lt
- Mindaugas Skujus.** Asymptotic conditions at infinity for non-stationary Stokes and Navier–Stokes problems.
mindaugas.skujus@mif.vu.lt

DEPARTMENT OF ECONOMETRIC ANALYSIS

<http://mif.vu.lt/lt2/struktura/eka>

Head Prof. Alfredas Račkauskas

Phone: +370 5 219 3076

alfredas.rackauskas@mif.vu.lt

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

Dmitrij Celov. Long-memory time series models in macroeconomics.

dmitrij.celov@mif.vu.lt

Vydas Čekanavičius. Signed compound Poisson approximations, Kolmogorov's problem.

vydas.cekanavicius@mif.vu.lt

Virmantas Kvedaras. Macroeconometrics.

virmantas.kvedaras@mif.vu.lt

Remigijus Lapinskas. Regression methods in ecology and medicine.

remigijus.lapinskas@mif.vu.lt

Remigijus Leipus. Financial mathematics and econometrics, time series analysis, insurance mathematics.

remigijus.leipus@mif.vu.lt

Aušra Maldeikienė. Modern economic thought.

ausra.maldeikiene@mif.vu.lt

Vytautas Maniušis. Empirical characteristic functions.

vytautas.maniusis@mif.vu.lt

Gediminas Murauskas. Information systems, linear and generalized linear mixed models and their applications.

gediminas.murauskas@mif.vu.lt

Rimas Norvaiša. Probability theory, financial analysis, financial mathematics, mathematical economics.

rimas.norvaisa@mii.vu.lt

Marijus Radavičius. Nonparametrical and adaptive estimation, econometrics, classification, image analysis.

marijus.radavicius@mii.vu.lt

Irma Rastėnė. Testing epidemic change in autoregressive processes.

irma.rastene@mif.vu.lt

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

alfredas.rackauskas@mif.vu.lt

Vaidotas Zemlys. Functional limit theorems for summation processes.

vaidotas.zemlys@mif.vu.lt

DOCTORAL STUDENTS

Vaidotas Characiejus. Random processes with time-varying long memory parameter.

vaidotas.characiejus@gmail.com

Lina Dindienė. Extreme value theory, insurance mathematics.

lina-dindiene@yahoo.com

Jurgita Markevičiūtė. Functional central limit theorems for nearly nonstationary processes.

jurgita.markeviciute@mif.vu.lt

Agnė Reklaitė. Factorial and structural models in econometrics.

agne.reklaite@mif.vu.lt

Jūratė Šliogerė. Approximation of Markov dependent sums of discrete random variables.

kamarauskaite.j@gmail.com

Mantas Tartėnas. Default prediction models.

mantas.tartenas@gmail.com

DEPARTMENT OF MATHEMATICAL ANALYSIS

<http://mif.vu.lt/lt2/struktura/mak>

Head Prof. Vygantas Paulauskas
Phone: +370 5 219 3083
vygantas.paulauskas@mif.vu.lt

Traditionally, the department gives courses in mathematical analysis (calculus) and related subjects. In recent years, the department, as responsible for bachelor and master programs in actuarial and financial mathematics, became more oriented toward applications and is offering main courses in actuarial and financial mathematics. The research areas of the department include heavy tailed distributions, time series, econometric and actuarial models, stochastic analysis.

Gintaras Bakštys. Actuarial mathematics. gintaras.bakstys@mif.vu.lt
Almantas Juozulynas. Very sparse random matrices and their spectrum.

almantas.juozulynas@mif.vu.lt

Antanas Lenksas. Numerical solution of SDEs. antanas.lenksas@mif.vu.lt

Kęstutis Liubinskas. Convergence rates in limit theorems of probability theory.

kestutis.liubinskas@mif.vu.lt

Vigirdas Mackevičius. Stochastic analysis, stochastic numerics.

vigirdas.mackevicius@mif.vu.lt

Martynas Manstavičius. Levy processes, path properties of random processes.

martynas.manstavicius@mif.vu.lt

Vygantas Paulauskas. Approximations of multidimensional stable laws, autoregressive models, random fields, tail index estimation, operator theory. vygantas.paulauskas@mif.vu.lt

Aleksandras Ernestas Plikusas. Sampling in official statistics, regression ratio estimators.

aleksandras.plikusas@mii.vu.lt

Donata Puplinskaitė. Aggregation of infinite-variance random processes.

donata.puplinskaite@mif.vu.lt

Aldona Skučaitė. Actuarial mathematics, stochastic modeling of insurance.

aldona.skucaite@mif.vu.lt

Jonas Šiaulyš. Actuarial mathematics, risk processes, probabilistic number theory.

jonas.siaulyš@mif.vu.lt

DOCTORAL STUDENTS

Agneška Korvel. Actuarial mathematics.

agneska.korvel@gmail.com

Edgaras Mielkaitis. Limit theorems and convergence rates for random linear processes and fields.

edgaras.mielkaitis@mif.vu.lt

DEPARTMENT OF MATHEMATICAL COMPUTER SCIENCE

<http://mif.vu.lt/lt2/struktura/matinf>

Head Prof. Gediminas Stepanauskas

Phone: +370 5 219 3050

gediminas.stepanauskas@mif.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.

Giedrius Alkauskas. Analytic number theory, structural constants.

giedrius.alkauskas@mif.vu.lt

Gintautas Bareikis. Distributions of the arithmetical functions.

gintautas.bareikis@mif.vu.lt

Mindaugas Bloznelis. Probability limit theorems, combinatorial statistics, random graphs.

mindaugas.bloznelis@mif.vu.lt

Saulius Gražulis. Crystallography databases.

saulius.grazulis@bti.vu.lt

Rimantas Grigutis. Structure of homogeneous finite-rank Abelian groups.

rimantas.grigutis@mif.vu.lt

Irus Grinis. Polyvalent interactions in biological systems.

irus.grinis@mif.vu.lt

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

algirdas.maciulis@mif.vu.lt

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

vilius.stakenas@mif.vu.lt

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

gediminas.stepanauskas@mif.vu.lt

Vytas Zacharovas. Probabilistic combinatorics, analysis of algorithms.

vytas.zacharovas@mif.vu.lt

DOCTORAL STUDENTS

Valentas Kurauskas. Random graphs and algorithms.

valentas.kurauskas@mif.vu.lt

Laura Žvinytė. Limit distributions of sums of additive functions.

l.zvinyte@eif.viko.lt

DEPARTMENT OF MATHEMATICAL STATISTICS

<http://mif.vu.lt/lt2/struktura/msk>

Head Prof. Vytautas Kazakevičius
Phone: +370 5 219 3065
vytautas.kazakevicius@mif.vu.lt

The main research areas at the department are theoretical and applied mathematical statistics, reliability and survival analysis, stochastic analysis, limit theorems in probability theory and mathematical statistics.

- Vilijandas Bagdonavičius.** Reliability theory, mathematical statistics, survival analysis.
vilijandas.bagdonavicius@mif.vu.lt
- Rimantas Eidukevičius.** Mathematical modelling, experimental planning and statistical analysis in oncology.
rimantas.eidukevicius@mif.vu.lt
- Vytautas Kazakevičius.** Mathematical statistics, nonlinear stochastic dynamic systems.
vytautas.kazakevicius@mif.vu.lt
- Julius Jonas Kruopis.** Mathematical statistics, quality control.
julius.kruopis@mif.vu.lt
- Rūta Levulienė.** Mathematical statistics, reliability, survival analysis.
ruta.levulienne@mif.vu.lt
- Viktor Skorniakov.** Mathematical statistics, time series. viktor.skorniakov@mif.vu.lt
- Pranas Vaitkus.** Large-deviation probabilities, neural networks, nonlinear time series.
pranas.vaitkus@mif.vu.lt
- Marijus Vaičiulis.** Statistical analysis of stochastic processes.
marijus.vaiciulis@mii.vu.lt

DOCTORAL STUDENTS

- Povilas Daniušis.** Machine learning, classification, artificial intelligence.
povilas.daniusis@mif.vu.lt

DEPARTMENT OF PROBABILITY THEORY AND NUMBER THEORY

<http://mif.vu.lt/en2/ttsk>

Head Prof. Antanas Laurinčikas
Phone: +370 5 219 3070
antanas.laurincikas@mif.vu.lt

Professors of the department give courses in algebra, number theory, probability theory and discrete mathematics. Their main scientific interests are related to the algebraic, analytic, and probabilistic number theory 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.

Giedrius Alkauskas. Analytic and dynamical methods in number theory.

giedrius.alkauskas@mif.vu.lt

Paulius Drungilas. Algebraic numbers, polynomials.

paulius.drungilas@mif.vu.lt

Artūras Dubickas. Algebraic numbers, distribution modulo 1.

arturas.dubickas@mif.vu.lt

Ramūnas Garunkštis. Analytic number theory, zeta-functions.

ramunas.garunkstis@mif.vu.lt

Henrikas Jasiūnas. History of mathematics.

henrikas.jasiunas@mif.vu.lt

Algirdas Javtokas. Non-classical zeta-functions.

algirdas.javtokas@mif.vu.lt

Audrius Kacėnas. Value distribution of the Riemann zeta-function.

audrius.kacenas@mif.vu.lt

Antanas Laurinčikas. Analytic and probabilistic number theory, value distribution of zeta-functions.

antanas.laurincikas@mif.vu.lt

Eugenijus Manstavičius. Analytic and probabilistic combinatorics, probabilistic number theory.

eugenijus.manstaviccius@mif.vu.lt

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

gintautas.misevicius@mif.vu.lt

DOCTORAL STUDENTS

Sondra Černigova. The periodic zeta-function.

sondra.cernigova@gmail.com

Andrius Grigutis. Distribution of zeros of zeta-functions.

andrius.grigutis@mif.vu.lt

Jonas Jankauskas. Algebraic numbers, polynomials.

jonas.jankauskas@mif.vu.lt

Kęstutis Janulis. Universality of zeta functions.

kestutis.janulis@mif.vu.lt

Justas Kalpokas. Analytic number theory.

justas.kalpokas@mif.vu.lt

Tatjana Kargina. Limit theorems for random combinatorial structures.

tatjana.kargina@mif.vu.lt

Erikas Karikovas. Investigation of properties of zeta-functions.

erikas.karikovas@mif.stud.vu.lt

Aivaras Novikas. Number theory, mathematical contests.

aivaras.novikas@mif.vu.lt

Jovita Rašytė. Universality of composite functions.

jovita.ras@gmail.com

Paulius Šarka. Number theory, additive combinatorics.

paulius.sarka@mif.vu.lt

Jonas Šiurys. Algebraic numbers, polynomials.

jonas.siurys@mif.vu.lt

Albertas Zinevičius. Distribution of lattice points, hyperelliptic curves.

albertas.zinevicius@mif.vu.lt

Žydrūnas Žilinskas. Moments of additive functions defined on random combinatorial structures.

zydrunas.zilinskas@gmail.com

DEPARTMENT OF SOFTWARE ENGINEERING

<http://mif.vu.lt/lt2/struktura/ps>

Head Prof. Romas Baronas
Phone: +370 5 219 3064
romas.baronas@mif.vu.lt

The department supervises the software engineering study program. The research areas of the department include software process, software engineering methods and tools, teaching software engineering, software quality management, business process modelling, information systems modelling, human-computer interaction, open queuing networks, message switching systems, computational modelling of physical-chemical processes, information security, electronic signature.

- Vytautas Ašeris.** Computer simulation of nonlinear diffusion and reaction processes.
vytautas.aseris@mif.vu.lt
- Romas Baronas.** Computer simulation of nonlinear diffusion and reaction processes.
romas.baronas@mif.vu.lt
- Donatas Čiukšys.** Business process ontology, business process knowledge reuse, software systems architecture.
donatas.ciuksys@mif.vu.lt
- Vytautas Čyras.** Legal informatics, compliance, contracts in SOA.
vytautas.cyras@mif.vu.lt
- Sigitas Dapkūnas.** Information system design, evaluation of software products, service oriented architecture.
sigitas.dapkunas@mif.vu.lt
- Vaidas Jusevičius.** Electronic payments systems, e-commerce fraud detection techniques.
vaidas.jusevicius@mif.vu.lt
- Kristina Lapin.** Human computer interaction (HCI), user experience design (UED), teaching of HCI and UED, mobile interfaces.
kristina.lapin@mif.vu.lt
- Žilvinas Ledas.** Computational modeling of bacterial behavior and augmented reality algorithms.
zilvinas.ledas@mif.vu.lt
- Saulius Minkevičius.** System theory.
saulius.minkevicius@mii.vu.lt
- Stasys Peldžius.** Software process modelling, assessment and improvement.
stasys.peldzius@mif.vu.lt
- Karolis Petrauskas.** Computer simulation of nonlinear diffusion and reaction processes.
karolis.petrauskas@mif.vu.lt
- Tomas Plankis.** Elliptic curves, programming in Windows API.
tomas.plankis@mif.vu.lt
- Saulius Ragaišis.** Software process modelling, assessment and improvement, software engineering education, electronic signature and electronic documents.
saulius.ragaisis@mif.vu.lt
- Laura Savičienė.** Software process improvement, aircraft collision probability and decision support system.
laura.saviciene@mif.vu.lt
- Albertas Šermokas.** Geographical information systems, information systems analysis and modelling: design, architecture, implementation, project management.
albertas.sermokas@mif.vu.lt
- Valdas Undzėnas.** Electronic signature.
valdas.undzenas@mif.vu.lt
- Vytautas Valaitis.** Artificial neural networks, multi-agent evolving systems.
vytautas.valaitis@mif.vu.lt

DOCTORAL DISSERTATIONS

1. **Eugenija Bieliauskienė**, *Ruin probability and Gerber-Shiu function for the discrete time risk model with inhomogeneous claims*, advisor prof. Jonas Šiaulyš.
2. **Andrius Čiginas**, *Approximations to distributions of linear combinations of order statistics in finite populations*, advisor prof. Mindaugas Bloznelis.
3. **Povilas Daniušis**, *Feature extraction via dependence structure optimization*, advisor prof. Pranas Vaitkus.
4. **Andrius Grigutis**, *Value distribution of Lerch and Selberg zeta-functions*, advisor prof. Ramūnas Garunkštis.
5. **Jonas Jankauskas**, *Heights of Polynomials*, advisor prof. Artūras Dubickas.
6. **Valdas Jasaitis**, *Computer modeling of self-ordered fronts under oscillating zero-mean forces*, advisor prof. Feliksas Ivanauskas.
7. **Justas Kalpokas**, *Discrete moments of the Riemann zeta function and Dirichlet L-functions*, advisor prof. Ramūnas Garunkštis.
8. **Aivaras Novikas**, *Composite numbers in the sequences of integers*, advisor prof. Artūras Dubickas.
9. **Laura Savičienė**, *Modeling and Visualization of Norm Violation in Decision Support for Aircraft Approach/Departure*, advisor prof. Vytautas Čyras.

PUBLICATIONS

MONOGRAPHS

1. **Romas Baronas, Feliksas Ivanauskas, Juozas Kulys**, *Mathematical modeling of biosensors: an introduction for chemists and mathematicians (in arabic)*, 544p.

ARTICLES INCLUDED IN THOMSON REUTERS SCIENCE CITATION INDEX¹

1. **Giedrius Alkauskas**, Friendly paths, *American Mathematical Monthly*, **119**(2), p. 167–168.
2. **Giedrius Alkauskas**, The Minkowski $\zeta(x)$ function and Salem's problem, *Comptes Rendus Mathematique*, **350**(3), p. 137–140.
3. **Julius Andrikonis**, Limits of the Letac principle. The discrete case, *Lithuanian Mathematical Journal*, **52**(4), p. 390–399.
4. **Julius Andrikonis**, Loop-free calculus for modal logic S4. I, *Lithuanian Mathematical Journal*, **52**(1), p. 1–12.
5. **Julius Andrikonis**, Loop-free calculus for modal logic S4. II, *Lithuanian Mathematical Journal*, **52**(2), p. 123–133.
6. **Vytautas Ašeris, Romas Baronas, Juozas Kulys**, Modelling the biosensor utilising parallel substrates conversion, *Journal of Electroanalytical Chemistry*, **685**, p. 63–71.
7. **Vilijandas Bagdonavičius, Sergey Malov, Mikhail Nikulin**, Homogeneity tests for related samples under censoring, *Communications in Statistics: Simulation and Computation*, **41**(6), p. 764–775.
8. **Aidas Balčiūnas, Antanas Laurinčikas**, The Laplace transform of Dirichlet L-functions, *Nonlinear Analysis: Modelling and Control*, **17**(2), p. 127–138.
9. **Povilas Banys, Vyantas Paulauskas**, CLT for linear random fields with martingale increments, *Lithuanian Mathematical Journal*, **52**(1), p. 13–28.
10. **Gintautas Bareikis, Algirdas Mačiulis**, Cesàro means related to the square of the divisor function, *Acta Arithmetica*, **156**(1), p. 83–99.
11. **Gintautas Bareikis, Algirdas Mačiulis**, Some applications of IFS based on square symmetries, *Nonlinear Analysis: Modelling and Control*, **17**(1), p. 16–26.
12. **Romas Baronas, Juozas Kulys, Karolis Petrauskas, Julija Razumienė**, Modelling carbon nanotubes-based mediatorless biosensor, *Sensors*, **12**(7), p. 9146–9160.

¹Thomson Reuters Web of Knowledge, Web of Science, Science Citation Index ([online search](#))

13. **Romas Baronas**, Juozas Kulys, **Dainius Šimelevičius**, Modelling of amperometric biosensor used for synergistic substrates determination, *Sensors*, **12**(4), p. 4897–4917.
Romas Baronas, see [6].
14. **Eugenija Bieliauskienė**, **Jonas Šiaulys**, Gerber–Shiu function for the discrete inhomogeneous claim case, *International Journal of Computer Mathematics*, **89**(12), p. 1617–1630.
15. **Mindaugas Bloznelis**, Friedrich Gotze, Jerzy Jaworski, Birth of a strongly connected giant in an inhomogeneous random digraph, *Journal of Applied Probability*, **49**(3), p. 601–611.
16. Peter Borwein, Stephen Choi, **Jonas Jankauskas**, On a class of polynomials related to Barker sequences, *Proceedings of the American Mathematical Society*, **140**(8), p. 2613–2625.
17. Jelena Čelutkienė, Diana Zakarkaitė, **Viktor Skorniakov**, Vida Žvironaitė, Virginija Grabauskienė, Jelizaveta Burca, Laura Ciparytė, Aleksandras Laucevičius, Quantitative approach using multiple single parameters versus visual assessment in dobutamine stress echocardiography, *Cardiovascular Ultrasound*, **10**, #31.
18. Dainius Characiejus, **Rimantas Eidukevičius**, Irutė Girkontaitė, Jurgita Juršėnaitė, Mykolas Mauricas, Expanded effector memory T-lymphocytes in DBA/2 mice do not inhibit the growth of SL2 tumours, *In Vivo*, **26**(4), p. 553–558.
19. Thomas Christ, **Justas Kalpokas**, Upper bounds for discrete moments of the derivatives of the Riemann zeta-function on the critical line, *Lithuanian Mathematical Journal*, **52**(3), p. 233–248.
20. Heidi Dahl, **Rimvydas Krasauskas**, Rational fixed radius rolling ball blends between natural quadrics, *Computer Aided Geometric Design*, **29**(9), p. 691–706.
Povilas Daniušis, see [40].
21. **Paulius Drungilas**, **Artūras Dubickas**, Chris Smyth, A degree problem for two algebraic numbers and their sum, *Publicacions Matemàtiques*, **56**(2), p. 413–448.
22. **Artūras Dubickas**, A basis of finite and infinite sets with small representation function, *Electronic Journal of Combinatorics*, **19**(1), 16 p., #P6.
23. **Artūras Dubickas**, Density of some sequences modulo 1, *Colloquium Mathematicum*, **128**(2), p. 237–244.
24. **Artūras Dubickas**, Heights of squares of Littlewood polynomials and infinite series, *Annales Polonici Mathematici*, **105**(2), p. 145–153.
25. **Artūras Dubickas**, On some rational triangles, *Mediterranean Journal of Mathematics*, **9**(1), p. 95–103.
26. **Artūras Dubickas**, On the linear independence of the set of Dirichlet exponents, *Kodai Mathematical Journal*, **35**(3), p. 642–651.
27. **Artūras Dubickas**, Roots of unity as quotients of two roots of a polynomial, *Journal of the Australian Mathematical Society*, **92**(2), p. 137–144.
28. **Artūras Dubickas**, **Paulius Šarka**, Sumsets of sparse sets, *Periodica Mathematica Hungarica*, **64**(2), p. 169–179.
Artūras Dubickas, see [21].
Rimantas Eidukevičius, see [18].
29. Virginija Garbaliuskienė, **Antanas Laurinčikas**, Limit theorems for twists of L-functions of elliptic curves. II, *Mathematical Modelling and Analysis*, **17**(1), p. 90–99.

30. **Ramūnas Garunkštis**, Raivydas Šimėnas, The a -values of the Selberg zeta-function, *Lithuanian Mathematical Journal*, **52**(2), p. 145–154.
31. **Ramūnas Garunkštis**, **Andrius Grigutis**, Zeros of the Lerch transcendent function, *Mathematical Modelling and Analysis*, **17**(2), p. 245–250.
32. **Saulius Gražulis**, Adriana Daškevič, **Andrius Merkys**, Daniel Chateigner, Luca Lutterotti, Miguel Quiros, Nadezhda Serebryanaya, Peter Moeck, Robert Downs, Armel Le Bail, Crystallography Open Database (COD): an open-access collection of crystal structures and platform for world-wide collaboration, *Nucleic Acids Research*, **40**(1), p. D420–D427.
Andrius Grigutis, see [31].
33. **Feliksas Ivanauskas**, Darius Juozas Jasaitis, Aivaras Kareiva, Mažvydas Mackevičius, A closer look at the computer modeling and sintering optimization in the preparation of YAG, *Journal of Mathematical Chemistry*, **50**(8), p. 2291–2302.
34. **Feliksas Ivanauskas**, **Tadas Meškauskas**, Gintaras Valinčius, Electrochemical impedance spectroscopy of tethered bilayer membranes, *Langmuir*, **28**(1), p. 977–990.
35. **Feliksas Ivanauskas**, Albertas Malinauskas, **Mantas Puida**, Modeling of electrocatalysis at chemically modified electrodes: a combination of second-order and Michaelis-type chemical kinetics, *Journal of Mathematical Chemistry*, **50**(7), p. 2001–2011.
36. **Feliksas Ivanauskas**, **Tadas Meškauskas**, Mifodijus Sapagovas, Numerical spectral analysis of a difference operator with non-local boundary conditions, *Applied Mathematics and Computation*, **218**(14), p. 7515–7527.
37. **Feliksas Ivanauskas**, Aivaras Kareiva, Mažvydas Mackevičius, Mathematical approach to investigation of synthesis processes at high temperatures, *Central European Journal of Chemistry*, **10**(2), p. 380–385.
38. **Jonas Jankauskas**, Charles Samuels, The t -metric Mahler measures of surds and rational numbers, *Acta Mathematica Hungarica*, **134**(4), p. 481–498.
Jonas Jankauskas, see [16].
39. **Kęstutis Janulis**, **Antanas Laurinčikas**, Renata Macaitienė, Darius Šiaučiūnas, Joint universality of Dirichlet L -functions and periodic Hurwitz zeta-functions, *Mathematical Modelling and Analysis*, **17**(5), p. 673–685.
40. Dominik Janzing, Joris Mooij, Kun Zhang, Jan Lemeire, Jakob Zscheischler, **Povilas Daniušis**, Bastian Steudel, Bernhard Scholkopf, Information-geometric approach to inferring causal directions, *Artificial Intelligence*, **182**, p. 1–31.
Justas Kalpokas, see [19].
41. **Kęstutis Karčiauskas**, Jorg Peters, Free-form splines combining NURBS and basic shapes, *Graphical Models*, **74**(6), p. 351–360.
42. **Pranas Katauskis**, **Vladas Skakauskas**, Numerical study of the kinetics of unimolecular heterogeneous reactions onto planar surfaces, *Journal of Mathematical Chemistry*, **50**(1), p. 141–154.
43. **Kristina Kaulakytė**, **Konstantinas Pileckas**, On the nonhomogeneous boundary value problem for the Navier–Stokes system in a class of unbounded domains, *Journal of Mathematical Fluid Mechanics*, **14**(4), p. 693–716.
44. **Vytautas Kazakevičius**, Limits of the Letac principle. The discrete case, *Lithuanian Mathematical Journal*, **52**(4), p. 390–399.

45. Tarang Khare, Shraddha Pai, **Karolis Koncevičius**, Mrinal Pal, Edita Kriukienė, Zita Liutkevičiūtė, Manuel Irimia, Peixin Jia, Carolyn Ptak, Menghang Xia, Raymond Tice, Mamoru Tochigi, Solange Morera, Anaies Nazarians, Denise Belsham, Albert Wong, Benjamin Blencowe, Sun–Chong Wang, Philipp Kapranov, Rafal Kustra, Viviane Labrie, Saulius Klimašauskas, Artūras Petronis, 5–hmC in the brain is abundant in synaptic genes and shows differences at the exon–intron boundary, *Nature Structural and Molecular Biology*. 2012, 19(10), p. 1037–1043.
46. **Neringa Klovienė**, **Konstantinas Pileckas**, Nonstationary Poiseuille–type solutions for the second-grade fluid flow, *Lithuanian Mathematical Journal*, 52(2), p. 155–171.
47. **Neringa Klovienė**, On a third order initial boundary value problem in a plane domain, *Nonlinear Analysis: Modelling and Control*, 17(3), p. 312–326.
- Karolis Koncevičius**, see [45].
48. Mikhail Korobkov, **Konstantinas Pileckas**, Remigio Russo, Steady Navier–Stokes system with nonhomogeneous boundary conditions in the axially symmetric case, *Comptes Rendus Mécanique*, 340(3), p. 115–119.
- Rimvydas Krasauskas**, see [20].
49. **Virmantas Kvedaras**, **Vaidotas Zemlys**, Testing the functional constraints on parameters in regressions with variables of different frequency, *Economics Letters*, 116, p. 250–254.
50. **Antanas Laurinčikas**, **Jovita Rašytė**, Generalizations of a discrete universality theorem for Hurwitz zeta–functions, *Lithuanian Mathematical Journal*, 52(2), p. 172–180.
51. **Antanas Laurinčikas**, Joint universality of Hurwitz zeta–functions, *Bulletin of the Australian Mathematical Society*, 86(2), p. 232–243.
52. **Antanas Laurinčikas**, On joint distribution of the Riemann zeta–function, *Integral Transforms and Special Functions*, 23(11), p. 853–862.
53. **Antanas Laurinčikas**, On joint universality of the Riemann zeta–function and Hurwitz zeta–functions, *Journal of Number Theory*, 132(12), p. 2842–2853.
54. **Antanas Laurinčikas**, On universality of the Lerch zeta–function, *Proceedings of the Steklov Institute of Mathematics*, 276, p. 167–175.
55. **Antanas Laurinčikas**, Universality of composite functions of periodic zeta functions, *Sbornik: Mathematics*, 203(11), p. 1631–1646.
- Antanas Laurinčikas**, see [8].
- Antanas Laurinčikas**, see [29].
- Antanas Laurinčikas**, see [39].
56. **Remigijus Leipus**, **Jonas Šiaulys**, Yang Yang, Asymptotic of random sums of negatively dependent random variables in the presence of dominatedly varying tails, *Lithuanian Mathematical Journal*, 52(2), p. 222–232.
57. **Remigijus Leipus**, **Jonas Šiaulys**, Closure of some heavy–tailed distribution classes under random convolution, *Lithuanian Mathematical Journal*, 52(3), p. 249–258.
58. **Remigijus Leipus**, **Jonas Šiaulys**, Yang Yang, On the ruin probability in a dependent discrete time risk model with insurance and financial risks, *Journal of Computational and Applied Mathematics*, 236(13), p. 3286–3295.

59. **Remigijus Leipus, Jonas Šiaulyš, Yang Yang**, Precise large deviations for compound random sums in the presence of dependence structures, *Computers and Mathematics with Applications*, 64(6), p. 2074–2083.
60. **Remigijus Leipus, Jonas Šiaulyš, Yang Yang**, Tail probability of randomly weighted sums of subexponential random variables under a dependence structure, *Statistics & Probability Letters*, 82(9), p. 1727–1736.
- Algirdas Mačiulis**, see [10].
- Algirdas Mačiulis**, see [11].
61. **Eugenijus Manstavičius**, On total variation approximations for random assemblies, *Discrete Mathematics and Theoretical Computer Science*, p. 97–108.
62. **Jurgita Markevičiūtė, Alfredas Račkauskas, Charles Suquet**, Functional central limit theorems for sums of nearly nonstationary processes, *Lithuanian Mathematical Journal*, 52(3), p. 282–296.
- Tadas Meškauskas**, see [34].
- Tadas Meškauskas**, see [36].
63. **Saulius Minkevičius, Stasys Steišūnas**, Laws of Little in an open queueing network, *Nonlinear Analysis: Modelling and Control*, 17(3), p. 327–343.
64. **Stanislovas Leonas Norgėla, Henrikas Pranevičius**, Applications of finite linear temporal logic to piecewise linear aggregates, *Informatica*, 23(3), p. 427–441.
65. **Grigory Panasenko, Konstantinas Pileckas**, Asymptotic analysis of the nonsteady viscous flow with a given flow rate in a thin pipe, *Applicable Analysis*, 91(3), p. 559–574.
66. **Vygantas Paulauskas**, A generalization of sectorial and quasi-sectorial operators, *Journal of Functional Analysis*, 262(5), p. 2074–2099.
67. **Vygantas Paulauskas, Marijus Vaičiulis**, Estimation of the tail index in the max-aggregation scheme, *Lithuanian Mathematical Journal*, 52(3), p. 297–315.
- Vygantas Paulauskas**, see [9].
- Karolis Petrauskas**, see [12].
68. **Konstantinas Pileckas, Remigio Russo**, On the existence of vanishing at infinity symmetric solutions to the plane stationary exterior Navier–Stokes problem, *Mathematische Annalen*, 352(3), p. 643–658.
- Konstantinas Pileckas**, see [43].
- Konstantinas Pileckas**, see [46].
- Konstantinas Pileckas**, see [48].
- Konstantinas Pileckas**, see [65].
- Mantas Puida**, see [35].
69. **Alfredas Račkauskas, Irma Rastenė**, Asymptotic results for polygonal processes related to an autoregression, *Lithuanian Mathematical Journal*, 52(2), p. 181–195.
- Alfredas Račkauskas**, see [62].
- Irma Rastenė**, see [69].

70. Jovita Rašytė, On discrete universality of composite functions, *Mathematical Modelling and Analysis*, 17(2), p. 271–280.
Jovita Rašytė, see [50].
71. Jurga Rukšėnaitė, **Pranas Vaitkus**, Prediction of composite indicators using combined method of extreme learning machine and locally weighted regression, *Nonlinear Analysis: Modelling and Control*, 17(2), p. 238–251.
72. **Svajūnas Sajavičius**, Stability of the weighted splitting finite–difference scheme for a two–dimensional parabolic equation with two nonlocal integral conditions, *Computers and Mathematics with Applications*, 64(11), p. 3485–3499.
Paulius Šarka, see [28].
73. Michael Shur, **Rimantas Vaicekauskas**, Artūras Žukauskas, Color–dulling solid–state courses of light, *Optics Express*, 20(9), p. 9755–9762.
Jonas Šiaulys, see [14].
Jonas Šiaulys, see [56].
Jonas Šiaulys, see [57].
Jonas Šiaulys, see [58].
Jonas Šiaulys, see [59].
Jonas Šiaulys, see [60].
Dainius Šimelevičius, see [13].
74. **Jonas Šiurys**, A linear recurrence sequence of composite numbers, *London Mathematical Society: Journal of Computation and Mathematics*, 15, p. 360–373.
75. **Vladas Skakauskas**, **Olga Štikonienė**, Stability of persistent solutions to a population dynamics model, *Applied Mathematics and Computation*, 218(17), p. 8987–8996.
Vladas Skakauskas, see [42].
Viktor Skorniakov, see [17].
Olga Štikonienė, see [75].
76. **Rimantas Vaicekauskas**, **Pranciškus Vitta**, Artūras Žukauskas, Optimization of solid–state lamps for photobiologically friendly mesopic lighting, *Applied Optics*, 51(35), p. 8423–8432.
Rimantas Vaicekauskas, see [73].
Rimantas Vaicekauskas, see [79].
77. **Marijus Vaičiulis**, Asymptotic properties of generalized DPR statistic, *Lithuanian Mathematical Journal*, 52(1), p. 95–110.
Marijus Vaičiulis, see [67].
Pranas Vaitkus, see [71].
78. **Pranciškus Vitta**, Laurynas Dabašinskas, Arūnas Tuzikas, Andrius Petrusis, Donatas Meškauskas, Artūras Žukauskas, Concept of intelligent solid–state street lighting technology, *Elektronika ir Elektrotechnika*, 18(10), p. 37–40.
Pranciškus Vitta, see [76].
Pranciškus Vitta, see [79].

Vaidotas Zemlys, see [49].

79. Artūras Žukauskas, Rimantas Vaicekuskas, Pranciškus Vitta, Arūnas Tuzikas, Andrius Petrusis, Michael Shur, Color rendition engine, *Optics Express*, **20**(5), p. 5356–5367.

ARTICLES INCLUDED IN THOMSON REUTERS CONFERENCE PROCEEDINGS CITATION INDEX²

1. Giedrius Alkauskas, Fourier–Stieltjes coefficients of the Minkowski question mark function, *Analytic and Probabilistic Methods in Number Theory: proceedings of the 5th international conference in honour of J. Kubilius, Palanga, 4–10 September, 2011*, eds. A. Laurinčikas, E. Manstavičius, G. Stepanauskas, p. 19–33.
2. Gintautas Bareikis, Algirdas Mačiulis, Asymptotic expectation of a sequence of arithmetical processes, *Analytic and Probabilistic Methods in Number Theory: proceedings of the 5th international conference in honour of J. Kubilius, Palanga, 4–10 September, 2011*, eds. A. Laurinčikas, E. Manstavičius, G. Stepanauskas, p. 35–48.
3. Romas Baronas, Karolis Petrauskas, One–dimensional modelling of a carbon nanotube-based biosensor, *ECMS 2012: 26th European Conference on Modelling and Simulation, May 29 – June 1, Koblenz, Germany: proceedings*, eds. K. Troitzsch, M. Möhring, U. Lotzmann, p. 121–127.
4. Jeremy Daniel Besson, Michael Boronowsky, Antanas Mitašiūnas, Tanja Woronowicz, Innovation, knowledge and technology transfer process capability model – innoSPICETM, *Software process improvement and capability determination: 12th International Conference, SPICE 2012, Palma, Spain, May 29–31: proceedings. Series: Communications in Computer and Information Science*, **290**(3), p. 75–84.
5. Konstantinas Bogdanas, Eugenijus Manstavičius, Stochastic processes on weakly logarithmic assemblies, *Analytic and Probabilistic Methods in Number Theory: proceedings of the 5th international conference in honour of J. Kubilius, Palanga, 4–10 September, 2011*, eds. A. Laurinčikas, E. Manstavičius, G. Stepanauskas, p. 69–80.
6. Sonda Černigova, Antanas Laurinčikas, On the mean square of the periodic zeta–function, *Analytic and Probabilistic Methods in Number Theory: proceedings of the 5th international conference in honour of J. Kubilius, Palanga, 4–10 September, 2011*, eds. A. Laurinčikas, E. Manstavičius, G. Stepanauskas, p. 91–99.
7. Edmundas Gaigalas, On the dimension of some spaces of generalized theta–series, *Analytic and Probabilistic Methods in Number Theory: proceedings of the 5th international conference in honour of J. Kubilius, Palanga, 4–10 September, 2011*, eds. A. Laurinčikas, E. Manstavičius, G. Stepanauskas, p. 143–149.
8. Antanas Laurinčikas, Darius Šiaučiūnas, A mixed joint universality theorem for zeta–functions. III, *Analytic and Probabilistic Methods in Number Theory: proceedings of the 5th international conference in honour of J. Kubilius, Palanga, 4–10 September, 2011*, eds. A. Laurinčikas, E. Manstavičius, G. Stepanauskas, p. 185–195.
9. Antanas Laurinčikas, Renata Macaitienė, On the universality of zeta–functions of certain cusp forms, *Analytic and Probabilistic Methods in Number Theory: proceedings of the 5th interna-*

²Thomson Reuters Web of Knowledge, Web of Science, Conference Proceedings Citation Index ([online search](#))

tional conference in honour of J. Kubilius, Palanga, 4–10 September, 2011, eds. A. Laurinčikas, E. Manstavičius, G. Stepanauskas, p. 173–183.

Antanas Laurinčikas, see [6].

Algirdas Mačiulis, see [2].

Eugenijus Manstavičius, see [5].

10. **Antanas Mitašiūnas, Saulius Ragaišis**, Electronic documents interoperability solutions in academic environment, *INTEL-EDU 2012: 3rd international workshop on intelligent educational systems and technology-enhanced learning: selected papers*, Riga, October 10–12, p. 21–34.

11. **Antanas Mitašiūnas, Leonids Novickis**, Enterprise SPICE based education capability maturity model h, *Workshops on business informatics reserach. Proceedings. Series: Lecture Notes in Business Information Processing*, **106**, p. 102–116.

Antanas Mitašiūnas, see [4].

12. **Židrina Pabarškaitė, Šarūnas Raudys, Aistis Raudys**, Multi-agent system based portfolio management in prior-to-crisis and crisis period, *Intelligent systems design and applications: 12th international conference, Kochi, India, November 27–29, 2012: proceedings*, p. 279–284.

13. **Stasys Peldžius, Saulius Ragaišis**, Framework for usage of multiple software process models, *Software process improvement and capability determination: 12th International Conference, SPICE 2012, Palma, Spain, May 29–31: proceedings. Series: Communications in Computer and Information Science*, **290(7)**, p. 210–221.

Karolis Petrauskas, see [3].

Saulius Ragaišis, see [10].

Saulius Ragaišis, see [13].

14. **Šarūnas Raudys, Aistis Raudys**, Three decision making levels in portfolio management, *CIFEr 2012: IEEE conference on computational intelligence for financial engineering & economics, New York, USA: proceedings*, p. 220–227.

Šarūnas Raudys, see [12].

Aistis Raudys, see [12].

Aistis Raudys, see [14].

15. **Jonas Šiaulys, Gediminas Stepanauskas**, Discrete uniform limit law for additive prime number indicators, *Analytic and Probabilistic Methods in Number Theory: proceedings of the 5th international conference in honour of J. Kubilius, Palanga, 4–10 September, 2011, eds. A. Laurinčikas, E. Manstavičius, G. Stepanauskas*, p. 255–263.

16. **Vilius Stakėnas**, The tuples of natural numbers and prime divisors, *Analytic and Probabilistic Methods in Number Theory: proceedings of the 5th international conference in honour of J. Kubilius, Palanga, 4–10 September, 2011, eds. A. Laurinčikas, E. Manstavičius, G. Stepanauskas*, p. 229–242.

Gediminas Stepanauskas, see [15].

ARTICLES IN GROUP A JOURNALS³

1. Shigeki Akiyama, Paulius Drungilas, Jonas Jankauskas, Height reducing problem on algebraic integers, *Functiones Et Approximatio Commentarii Mathematici*, 47(1), p. 105–119.
2. Algirdas Ambrazevičius, Solvability theorem for a model of a unimolecular heterogeneous reaction with adsorbate diffusion, *Journal of Mathematical Sciences*, 184(4), p. 383–398.
3. Vytautas Ašeris, Romas Baronas, Juozas Kulys, Effects of diffusion limitations on the response of biosensors utilizing parallel substrates conversion, *ECCOMAS 2012: 6th European congress on computational methods in applied sciences and engineering: proceedings, Vienna, September 10–14*, p. 1–10.
4. Romas Baronas, Žilvinas Ledas, Remigijus Šimkus, Computational modeling of self-organization in a liquid phase bacterial bioluminescent biosensor, *ECCOMAS 2012: 6th European congress on computational methods in applied sciences and engineering: proceedings, Vienna, September 10–14*, p. 1–8.
Romas Baronas, see [3].
5. Adomas Birštunas, Antanas Mitašiūnas, Saulius Ragaišis, Arūnas Stočkus, Electronic archive information system, *Databases and information systems: 10th international Baltic conference: proceedings, July 8–11, 2012, Lithuania, eds. A. Čaplinskas, G. Dzemyda, A. Lupeikienė, O. Vasilecas*, p. 107–114.
6. Vydas Čekanavičius, N. S. Upadhyne, P. Vellaisamy, On negative binomial approximation, *Теория Вероятностей и ее Применения*, 57(1), с. 141–154.
7. Vytautas Čyras, Reinhard Riedl, Formulating the enterprise architecture compliance problem, *Databases and information systems: 10th international Baltic conference: proceedings, July 8–11, 2012, Lithuania, eds. A. Čaplinskas, G. Dzemyda, A. Lupeikienė, O. Vasilecas*, p. 142–153.
8. Vytautas Čyras, Harald Hoffman, Friedrich Lachmayer, Multisensorische Modelle des Rechts: zur syntaktischen Entfaltung von Rechtstheorie und Rechtsinformatik, *Jusletter IT*, p. 1–7.
9. Vytautas Čyras, Friedrich Lachmayer, Multisensory legal machines and legal act production, *Law, science, technology: 25th IVR World congress, 15–20 August, 2011, Germany, 26*, p. 1–18.
10. Vytautas Čyras, Kristina Lapin, Laura Savičienė, The SKY–Scanner time–critical decision support system for surveillance and risk evaluation during landing and take–off, *Journal of Aerospace Operations*, 1(3), p. 301–314.
11. Valentina Dagienė, Gerald Futschek, Knowledge construction in the Bebras problem solving contest, *Constructionism 2012: theory practice and impact: conference proceedings, August 21–25, Greece*, p. 678–680.
12. Sigitas Dapkūnas, Antanas Mitašiūnas, Implementation of information system for complaints' investigation, *Інформаційні технології в економіці менеджменті і бізнесі. Проблеми науки, практики і освіти: XVIII міжнародна науково–практична конференція*, p. 258–260.
13. Youri Davydov, Vygantas Paulauskas, A simple approach in limit theorems for linear random processes and fields with continuous time, *Теория Вероятностей и ее Применения*, 57(4), p. 724–743.

³Categories S3, S4, P1b, P1c, P1d and P1e in VU publications database.

14. **Paulius Drungilas**, On a problem related to number systems, *Šiauliai Mathematical Seminar*, 7(15), p. 13–18.
Paulius Drungilas, see [1].
15. **Artūras Dubickas**, **Aivaras Novikas**, On integers expressible by some special linear form, *Acta Mathematica Universitatis Comeniana*, 81(2), p. 203–209.
16. **Gintautas Grigas**, **Tatjana Jevsikova**, **Agnė Strelkauskytė**, Localisation issues of software shortcut keys, *Localisation Focus*, p. 40–53.
17. **Eglė Ignatavičiūtė**, **Rasa Mikalauskaitė–Arminienė**, **Jonas Šiaulys**, Lee–Carter mortality forecasting, *Lietuvos Statistikos Darbai*, 51(1), p. 22–35.
Jonas Jankauskas, see [1].
Tatjana Jevsikova, see [16].
18. **Tatjana Kargina**, **Eugenijus Manstavičius**, Multiplicative functions on \mathbb{Z}_+^n and the Ewens sampling formula, *RIMS Kokyuroku Bessatsu: Functions in Number Theory and Their Probabilistic Aspects*, eds. *K. Matsumoto, S. Akiyama, K. Fukuyama, H. Nakada, H. Sugita, A. Tamagawa*, B34, p. 137–151.
19. **Pranas Katauskis**, **Vladas Skakauskas**, **Alex Skvortsov**, On the reaction–diffusion model of the receptor–toxin–antibody interaction, *Шестые Поляховские чтения: международная научная конференция по механике, 31 января – 3 февраля 2012 г., Санкт–Петербург*, p. 127–132.
20. **Arvydas Kregždė**, Government Debt Sustainability: the Lithuanian Case, *Ekonomika*, 91(3), p. 56–71.
21. **Virmantas Kvedaras**, **Remigijus Leipus**, **Jonas Šiaulys**, Estimation of the generalized stochastic claims Reserving model and the chain–ladder method, *Pinigų Studijos*, 16(1), p. 68–90.
22. **Virmantas Kvedaras**, Empirical testing of the export–led and balance of payments constrained growth: the case of Portugal, *Models of blance of payments constrained growth: history, theory and empirical evidence*, eds. *E. Soukiazis, P. Cerqueira*.
23. **Rimantas Kybartas**, Fuzzy templates for pairwise multiclass classification, *ICPRAM 2012: Proceedings of the 1st International Conference on Pattern Recognition Applications and Methods, February 6–8, Algarve, Portugal*, eds. *P. Carmona, J. Sánchez, A. Fred*, 2, p. 564–567.
Kristina Lapin, see [10].
24. **Antanas Laurinčikas**, The Riemann zeta–function: approximation of analytic functions, *Advances in Applied Analysis*, eds. *S. Rogosin, A. Koroleva*, p. 95–114.
25. **Antanas Laurinčikas**, Universality of composite functions, *RIMS Kokyuroku Bessatsu: Functions in Number Theory and Their Probabilistic Aspects*, eds. *K. Matsumoto, S. Akiyama, K. Fukuyama, H. Nakada, H. Sugita, A. Tamagawa*, B34, p. 191–204.
26. **Antanas Laurinčikas**, **Darius Šiaučiūnas**, On zeros of some analytic functions related to the Hurwitz zeta–function, *Чебышевский Сборник*, 13(2), p. 86–90.
27. **Antanas Laurinčikas**, Some value–distribution theorems for periodic Hurwitz zeta–functions, *Journal of Mathematical Sciences*, 180(5), p. 581–591.
Remigijus Leipus, see [21].
Eugenijus Manstavičius, see [18].

28. Gintautas Misevičius, Sigutė Vakrinienė, Linear and non-linear optimization models for the selection of investment portfolio, *Šiauliai Mathematical Seminar*, 7(15), p. 79–88.
29. Antanas Mitašiūnas, Saulius Ragaišis, Arūnas Stočkus, Electronic documents: towards a cloud, *Інформаційні технології в економіці менеджменті і бінесі. Проблеми науки, практики і освіти: XVIII міжнародна науково-практична конференція, 29 листопада*, p. 260–262.
Antanas Mitašiūnas, see [5].
Antanas Mitašiūnas, see [12].
30. Kazimieras Navickis, Geometry of distribution of flags in the even-dimensional affine space, *Šiauliai Mathematical Seminar*, 7(15), p. 89–114.
Aivaras Novikas, see [15].
Vygantas Paulauskas, see [13].
31. Gintaras Puriuškis, On the minimum of certain functional, *Šiauliai Mathematical Seminar*, 7(15), p. 125–134.
Saulius Ragaišis, see [5].
Saulius Ragaišis, see [29].
32. Svajūnas Sajavičius, The splitting finite-difference schemes for two-dimensional parabolic equation with nonlocal weighted integral conditions, *ECCOMAS 2012: 6th European congress on computational methods in applied sciences and engineering: proceedings, Vienna, September 10–14*, p. 1–12.
33. Laura Savičienė, Operationalization of norms in aircraft approach/departure decision support, *Databases and information systems: 10th international Baltic conference: proceedings, July 8–11, 2012, Lithuania, eds. A. Čaplinskas, G. Dzemyda, A. Lupeikienė, O. Vasilecas*, p. 208–214.
Laura Savičienė, see [10].
Jonas Šiaulys, see [17].
Jonas Šiaulys, see [21].
Vladas Skakauskas, see [19].
Arūnas Stočkus, see [5].
Arūnas Stočkus, see [29].
34. Ineta Tučiūtė, Marijus Vaičiulis, Trupmeninio Brauno judesio agregavimas, *Jaunujų Mokslininkų Darbai*, 3(36), p. 174–178.
Marijus Vaičiulis, see [34].
35. Albertas Zinevičius, On the average number of rational points of bounded height on hyperelliptic curves, *Beiträge zur Algebra und Geometrie*, 53(1), p. 225–233.
36. Albertas Zinevičius, $x^5 - y^2 = 4$ and Gaussian integers, *Šiauliai Mathematical Seminar*, 7(15), p. 157–161.

ARTICLES IN GROUP B JOURNALS⁴

1. Lina Abelytė, Aistė Elijo, Gabiausiųjų mokymo taikant Mensa galvosūkius galimybės, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 151–156.

⁴Categories S5, P1f, P2a, P2b, P2c in VU publications database.

2. Algirdas Ambrazevičius, Alicija Eismontaitė, On a mathematical model of dissociative adsorption and associative desorption, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 7–12.
3. Vytautas Ašeris, Biojutiklio su lygiagrečiu substratų virsmu ir dializės membrana kompiuterinis modeliavimas, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 1–6.
4. Vytautas Ašeris, Andrius Čepaitis, Efektyvi virtualizacija skaičiavimams debesyse, *Informacinės technologijos 2012: 17-osios tarpuniversitetinės magistrantų ir doktorantų konferencijos pranešimų medžiaga Vilnius*, p. 161–164.
5. Vytautas Ašeris, Ieva Paužaitė, Kompiuterinis biojutiklių modeliavimas taikant kintamą diskrečiosios gardelės erdvės žingsnį, *Informacinės technologijos 2012: 17-osios tarpuniversitetinės magistrantų ir doktorantų konferencijos pranešimų medžiaga Vilnius*, p. 1–4.
6. Romas Baronas, Žilvinas Ledas, Remigijus Šimkus, Modeling and simulation of bacterial self-organization in circular container along contact line as detected by bioluminescence imaging, *International Journal On Advances in Systems and Measurements*, 5(3), p. 154–163.
7. Vytautas Čyras, Reinhard Riedl, Enterprise architects concern legal requirements for the compliance with the law, *Jusletter IT*, 27 February 2012, p. 1–8.
Alicija Eismontaitė, see [2].
8. Aistė Elijio, Lithuania, *TIMSS 2012 encyclopedia: education policy and curriculum in mathematics and science*, 2, p. 545–555.
9. Aistė Elijio, Lithuania, *PIRLS 2011 encyclopedia: Education policy and curriculum in reading, Vol. 2: L–Z and benchmarking participants*, p. 387–394.
10. Aistė Elijio, Dovilė Malijonytė, Simetrija kaip matematinų uždavinių sprendimo taktika, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 157–162.
Aistė Elijio, see [1].
11. Virginija Garbaliuskiene, Antanas Laurinčikas, Renata Macaitienė, Darius Šiaučiūnas, Universality of some zeta-functions, *Ученые записки Орловского государственного университета. Серия: Естественные, технические и медицинские науки*, 6.
12. Irus Grinis, Feliksas Ivanauskas, Gediminas Stepanauskas, Kai kurie polivalentinių sistemų modeliavimo geometriniai aspektai, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 62–67.
13. Feliksas Ivanauskas, Liana Stonkienė, Biojutiklio su substrato ir produkto degeneracija matematinis modeliavimas, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 102–107.
Feliksas Ivanauskas, see [12].
14. Algimantas Juozapavičius, Saulius Lapienis, Jelena Tamulienė, Vidmantas Tomkus, Grid computing for the space technology research, *Space Research Review*, 1, p. 213–219.
15. Romualdas Kašuba, Becoming a little bit cleverer and considerably more joyful, *MCG Newsletter*(2), p. 17–23.
16. Romualdas Kašuba, Regina Rudalevičienė, Kangaroo problem: outburst of intellect or stage-managed impromptu?, *Teaching mathematics: retrospective and perspectives: 13th international conference, May 30 – June 1, 2012, Tartu: proceedings*, p. 213–228.

17. **Romualdas Kašuba**, Matematikos dėstymas Vaikų universitete – iššūkiai ir galimybės, *Matematika ir matematikos dėstymas – 2012: konferencijos pranešimų medžiaga*, p. 9–21.
18. **Romualdas Kašuba**, Might it be so that being perfect sometimes indeed might only mean being simple or as short as possible?, *MCG Newsletter*(2), p. 31–40.
19. **Romualdas Kašuba**, Regina Rudalevičienė, Uždavinio sprendimas kaip mokslo kūrimo pro-vaizdis, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 220–225.
20. **Romualdas Kašuba**, Wie bunt und lustig kann der Text der Aufgabe sein und wozu soll es gut sein?, *Beiträge Zum Mathematikunterricht*.
21. **Romualdas Kašuba**, How to achieve everything (theoretically) while (practically) doing nothing?, *MCG Newsletter*(4), p. 20–31.
22. **Pranas Katauskis, Vladas Skakauskas**, Alex Skvortsov, Numerical simulation of a receptor-toxin-antibody interaction, *CMMSE 2012: proceedings of the 12th international conference on computational and mathematical methods in science and engineering*, eds. J. Vigo–Aguiar, 3, p. 1111–1117.
23. **Kristina Kaulakytė**, Stacionarios Navjė–Stokso lygtys su nenuline kraštine sąlyga dviejų sluoksnių sistemoje, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 13–18.
Antanas Laurinčikas, see [11].
24. **Eugenijus Manstavičius, Robertas Petuchovas**, Distribution of the combinatorial multisets component vectors, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 66–71.
25. **Gintautas Misevičius**, A joint limit theorem for zeta–functions of newforms, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 84–89.
26. **Kazimieras Navickis**, Glaustinių hiperpaviršių afininė diferencialinė geometrija, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 37–41.
27. **Stanislovas Leonas Norgėla**, On decidability of pure hybrid logic, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 90–95.
28. **Gailė Paukštaitė, Artūras Štikonas**, Generalized Green’s functions for second–order discrete boundary–value problems with nonlocal boundary conditions, *Proceedings of the Lithuanian Mathematical Society. Series A*, 53, p. 96–101.
29. **Stasys Peldžius**, Formalized description of the transitional software process model, *Informacinės technologijos 2012: 17–osios tarpuniversitetinės magistrantų ir doktorantų konferencijos pranešimų medžiaga*, Vilnius, p. 89–92.
Vladas Skakauskas, see [22].
Gediminas Stepanauskas, see [12].
Artūras Štikonas, see [28].
Jelena Tamulienė, see [14].

TEXTBOOKS

1. **Antanas Apynis**, Stanislava Stungurienė, *Verslo ir vadybos matematika: vadovėlis*, 228 p.

BOOKS AND LECTURE NOTES

1. **Gintautas Bareikis**, *Mathematical Finance: lecture notes*, 148 p.
2. **Artūras Dubickas**, *2012 metų Lietuvos mokinių matematikos olimpiados uždavinių sąlygos ir sprendimai: 61-oji Lietuvos mokinių matematikos olimpiada, Utena, 2012 04 02*, Vilnius: Vilniaus Universitetas, 8 p., mif.vu.lt/~dubickas/files/dvifailai/2012LM0.pdf.
3. **Aistė Elijio**, **Saulius Zybartas**, *Pasiruošk pasiekimų patikrinimui: matematika*, 74 p.
4. **Aistė Elijio**, *Elements of Test Theory, educational book*.
5. **Romualdas Kašuba**, *Как решать задачу, когда не знаешь как: пособие для учащихся общеобразовательных учреждений*, Москва: Просвещение, 174 p.
6. **Kęstutis Maknys**, **Gintautas Misevičius**, **Vilius Palenskis**, **Sandra Pralgauskaitė**, *Tikimybių teorijos ir atsitiktinių vyksmų uždaviniai: mokymo priemonė fizinių ir inžinerijos mokslų aukštųjų mokyklų studentams*, Vilnius: Vilniaus universiteto leidykla, 100 p.
7. **Gediminas Stepanauskas**, *Riba: paskaitų konspektas bakalauro studijų Fizikos fakulteto studentams*, 14 p.

CONFERENCE REPORTS

1. Lina Abelytė, Aistė Eljio, Possibilities of using Mensa puzzles in teaching the gifted, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
2. Giedrius Alkauskas, Minkovskio „klastuko“ funkcija ir Salemo uždavinys, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
3. Algirdas Ambrazevičius, Solvability theorem to a unimolecular heterogeneous reaction model, *Шестые Поляховские чтения: международная научная конференция по механике, 31 января – 3 февраля 2012 г., Санкт–Петербург*, p. 103.
4. Algirdas Ambrazevičius, Models of biopopulations and surface reactions, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
5. Vytautas Ašeris, Biojutiklio su lygiagrečiu substratų virsmu ir dializės membrana kompiuterinis modeliavimas, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
6. Vytautas Ašeris, Romas Baronas, Juozas Kulys, Computational modeling of catalase–peroxidase biosensor, *17th international conference Mathematical Modelling and Analysis, June 6–9, 2012, Tallinn, Estonia*, p. 15.
7. Vytautas Ašeris, Romas Baronas, Juozas Kulys, Effects of diffusion limitations on the response of biosensors utilizing parallel substrates conversion, *ECCOMAS 2012: 6th European congress on computational methods in applied sciences and engineering: proceedings, Vienna, September 10–14*, p. 1–2.
8. Vilijandas Bagdonavičius, Rūta Levulienė, Suderinamumo kriterijai skirstinių šeimoms, priklausantiems nuo mastelio ir formos parametru, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
9. Vilijandas Bagdonavičius, Rūta Levulienė, Suderinamumo kriterijai homogeniniams ir parametriniams nehomogeniniams Markovo procesams, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
10. Gintautas Bareikis, Algirdas Mačiulis, Su multiplikatyviosiomis funkcijomis susiję aritmetiniai procesai, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
11. Romas Baronas, Žilvinas Ledas, Remigijus Šimkus, Computational modeling of self-organization in a liquid phase bacterial bioluminescent biosensor, *ECCOMAS 2012: 6th European congress on computational methods in applied sciences and engineering: proceedings, Vienna, September 10–14*, p. 1–2.
12. Romas Baronas, Evelina Gaidamauskaitė, Juozas Kulys, Computer modelling of glucose dehydrogenase-based amperometric biosensor, *NICE 2012: Nature Inspires, Chemistry Engineers: International Conference on Bioinspired and Biobased Chemistry & Materials, October 3–5, Nice, France*, p. 154.

13. **Romas Baronas**, Žilvinas Ledas, Remigijus Šimkus, Two-dimensional modeling of the bacterial self-organization in a circular container, *17th international conference Mathematical Modelling and Analysis*, June 6–9, 2012, Tallinn, Estonia, p. 77.
14. Algimantas Bikelis, **Pranas Vaitkus**, Amoroso skirstinio klausimu, *53rd Conference of Lithuanian Mathematical Society*, June 11–12, 2012, Klaipėda University.
15. **Mindaugas Bloznelis**, Degree and clustering coefficient in sparse random intersection graphs, *GPSD 2012: 10th German Probability and Statistics Days*, March 6–9, Mainz, p. 60.
16. **Mindaugas Bloznelis**, Random intersection graphs, *24th Nordic Conference on Mathematical Statistics*, 10–14 June, 2012, Umeå, p. 26.
17. **Mindaugas Bloznelis**, **Valentas Kurauskas**, Sankirtų grafai ir klikos, *Fizinių ir technologijos mokslų tarpdalykiniai tyrimai: antroji LMA Jaunujų mokslininkų konferencija*, Vilnius, 2012 02 14.
18. **Mindaugas Bloznelis**, **Valentas Kurauskas**, Dvidaliai realiųjų tinklų modeliai, *53rd Conference of Lithuanian Mathematical Society*, June 11–12, 2012, Klaipėda University.
19. **Mindaugas Bloznelis**, Degree and clustering in sparse intersection graph, *4th Polish Combinatorial Conference*, Będlewo, September 17–21.
20. **Vydas Čekanavičius**, The Stein method for negative binomial approximation, *53rd Conference of Lithuanian Mathematical Society*, June 11–12, 2012, Klaipėda University.
21. **Sondra Černigova**, **Antanas Laurinčikas**, Atkinsono formulės liekamojo nario įvertis, *53rd Conference of Lithuanian Mathematical Society*, June 11–12, 2012, Klaipėda University.
22. **Sondra Černigova**, A mean square formula for the periodic zeta function, *Abstracts of MMA 2012*, June 6–9, 2012, Tallin, Tallin University of Technology, p.29.
23. **Vytautas Čyras**, Friedrich Lachmayer, Legal terms as a modally indifferent substrate, *Symposium "Recht und logic"*, August 24–25, 2002, Munich.
24. **Vytautas Čyras**, Friedrich Lachmayer, Three layers of legal argumentation: content, speech act, and role, *International Conference on Alternative Methods of Argumentation in Law, Argumentation 2012*, October 26, Brno.
25. **Vytautas Čyras**, Friedrich Lachmayer, Visualization of Hajime Yoshino's logical jurisprudence, *Workshop Fundamental Concepts and the Systematization of Law (FCASL 2012) in conjunction with The 25th International Conference on Legal Knowledge and Information Systems (JURIX 2012)*, December 17, Amsterdam.
26. **Lina Dindienė**, Yang Yang, On the max sum equivalence under negative dependence, *53rd Conference of Lithuanian Mathematical Society*, June 11–12, 2012, Klaipėda University.
27. **Artūras Dubickas**, Bases with small representation function, *UDT 2012: 3rd International Conference on Uniform Distribution Theory*, Smolenice, Slovakia, June 25–29: abstracts, p. 6.
28. **Artūras Dubickas**, Lietuvos komanda pasaulinėje matematikų olimpiadoje: pirmieji dvidešimt metų (nuo 1992 m. iki 2011 m.), *53rd Conference of Lithuanian Mathematical Society*, June 11–12, 2012, Klaipėda University.
29. **Rimantas Eidukevičius**, Atliekų utilizavimo proceso tyrimas, *53rd Conference of Lithuanian Mathematical Society*, June 11–12, 2012, Klaipėda University.
30. **Aistė Eljio**, Dovilė Malijonytė, Symmetry as tactics of solving mathematical problems, *53rd Conference of Lithuanian Mathematical Society*, June 11–12, 2012, Klaipėda University.

31. Sigita Glaveckaitė, Nomeda Rima Valevičienė, Darius Palionis, Viktor Skorniakov, Algirdas Edvardas Tamošiūnas, Aleksandras Laucevičius, Prediction of global left ventricular functional recovery in patients with heart failure undergoing revascularisation, based on late gadolinium enhancement and low dose dobutamine cardiovascular magnetic resonance, *Circulation*, 125(19), p. e76.
32. Irus Grinis, Feliksas Ivanauskas, Gediminas Stepanauskas, Some geometric aspects of polyvalent systems modeling, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
33. Irus Grinis, Feliksas Ivanauskas, Gediminas Stepanauskas, Kai kurie geometriniai polivalenčių sąveikų aspektai, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
34. Feliksas Ivanauskas, Jurij Novickij, Mifodijus Sapagovas, On the stability of an explicit difference scheme for hyperbolic equation with integral conditions, *Mathematical modelling and analysis: 17th international conference, June 6–9, 2012, Tallinn*, p. 1.
35. Feliksas Ivanauskas, Simonas Kareiva, Simas Šakirzanovas, Algirdas Selskis, Scanning electron microscopy (SEM): extrapolation of 3D data from SEM micrographs, *Nanochemistry and nanomaterials: international conference of young chemists, 7–9 December, 2012, Palanga, Lithuania: conference program and book of abstracts*, p. 27.
36. Feliksas Ivanauskas, Liana Stonkienė, Mathematical modelling of biosensors with substrate and product degeneration, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
37. Feliksas Ivanauskas, Aivaras Kareiva, Mažvydas Mackevičius, Mathematical modeling of yttrium granate synthesis: three dimensional case, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
38. Feliksas Ivanauskas, Jurij Novickij, Mifodijus Sapagovas, On the stability of difference solution of hyperbolic equation with nonlocal boundary conditions, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
39. Kęstutis Janulis, Apie Dirichlė L funkcijas, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
40. Kęstutis Janulis, Joint universality of Dirichlet L–functions and Hurwitz zeta–functions, *Abstracts of MMA 2012, June 6–9, 2012, Tallin, Tallin University of Technology*, p.58.
41. Algimantas Juozapavičius, Ramūnas Markauskas, Stuburo ir dubens kaulų sistemos modeliavimas, *Fizinių ir technologijos mokslų tarpdalykiniai tyrimai: antroji LMA Jaunųjų mokslininkų konferencija, Vilnius, 2012 02 14*.
42. Kęstutis Karčiauskas, Curve subdivision, splines and basic shapes, *Industry Challenges in Geometric Modeling, CAD and Simulation – 2012, Darmstadt TU, Germany, March 22–23*.
43. Kęstutis Karčiauskas, Curvature–sensitive splines, *Eight International Conference on Mathematical Methods for Curves and Surfaces, Oslo, Norway, June 28 – July 03*.
44. Kęstutis Karčiauskas, Non–uniform interpolatory curve subdivision via splines, *International Workshop New Trends in Subdivision and Related Applications, Milano–Bicoca University, Italy, September 04–07*.
45. Kęstutis Karčiauskas, Curvature–sensitive splines and design with basic curves, *Symposium in Solid and Physical Modeling, University of Burgundy, Dijon, France, October 29–31*.

46. **Romualdas Kašuba**, Text formulation of the problems of the mathematical olympiads, *Проблеми та перспективи фахової підготовки вчителя математики: матеріали конференції, 26–27 квітня 2012 р., Вінниця, Україна*, p. 257–258.
47. **Romualdas Kašuba**, Regina Rudalevičienė, Solving of mathematical problems as preimage of creation and developing of scientific theories, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
48. **Romualdas Kašuba**, Aivaras Novikas, Connection between math problem solving and poetry as the models of inventive thinking and its elegant expression, *13th international conference Teaching Mathematics: Retrospective and Perspectives, May 30–31, University Tartu, Estonia*.
49. **Romualdas Kašuba**, Regina Rudalevičienė, Kangaroo problem: outburst of intellect or stage-managed impromptu?, *13th international conference Teaching Mathematics: Retrospective and Perspectives, May 30–31, University Tartu, Estonia*.
50. **Pranas Katauskis**, Vladas Skakauskas, On the kinetics unimolecular heterogeneous reactions onto planar surfaces, *Шестые Поляховские чтения: международная научная конференция по механике, 31 января – 3 февраля 2012 г., Санкт–Петербург*, p. 106.
51. **Pranas Katauskis**, Vladas Skakauskas, Alex Skvortsov, On the receptor-toxin-antibody interaction problem, *Шестые Поляховские чтения: международная научная конференция по механике, 31 января – 3 февраля 2012 г., Санкт–Петербург*, p. 251.
52. **Pranas Katauskis**, Vladas Skakauskas, Some models of unimolecular surface reactions, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
53. **Pranas Katauskis**, Vladas Skakauskas, Numerical study of the model of unimolecular surface reactions, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
54. **Kristina Kaulakytė**, On the Navier–Stokes equations with nonhomogeneous boundary conditions in a system of connected layers, *International Conference on Parabolic and Navier–Stokes Equations, September 2–8, Poland*.
55. **Kristina Kaulakytė**, Stationary Navier–Stokes equations with non-homogeneous boundary condition in a system of two connected layers, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
56. **Rimvydas Krasauskas**, Severinas Zubė, Studying Darboux and isotropic cyclides with geometric algebra, *Eight International Conference on Mathematical Methods for Curves and Surfaces, June 28 – July 03, Oslo, Norway*.
57. **Ričardas Kudžma**, Function's portrait with a pencil and with Geogebra, *13th international conference Teaching Mathematics: Retrospective and Perspectives, May 30–31, University Tartu, Estonia*.
58. **Ričardas Kudžma**, Ala Rožkova, Virginija Vilkotyte, Geogebra in the 10th grade mathematics, *III Nordic Geogebra conference, September 14–16, 2012, Tartu, Estonia*.
59. **Valentas Kurauskas**, Largest clique in sparse random intersection graphs, *4th Polish Combinatorics Conference, Będlewo, Poland, 16–22 September*.
60. **Valentas Kurauskas**, Random graphs with disjoint forbidden minors, *Combinatorics seminar, Adam Mickiewicz University, Poznan, Poland, 4 December*.

61. **Antanas Laurinčikas**, Estimates for the number of zeros of some analytic functions related to the Riemann zeta–function, *Analytic Methods of Analysis and Differential Equations*, Minsk, Belarus, September 10–14, p. 42.
62. **Antanas Laurinčikas**, Joint universality and its consequences for Hurwitz zeta–functions, *Mathematical modelling and analysis: 17th international conference, June 6–9, 2012, Tallinn, Estonia*, p. 75.
63. **Antanas Laurinčikas**, Universality of some functions related to zeta–functions of certain cusp forms, *International mathematical conference: book of abstracts, June 13–19, 2012, Mykolajiv, Ukraine*, p. 22.
64. **Antanas Laurinčikas**, Universality of some functions related to zeta–functions of certain cusp forms, *Diophantine analysis: conference program and abstract book, 2012 July 30–August 3, Astrakhan, Russia*, p. 30.
65. **Antanas Laurinčikas**, Profesorius Jonas Kubilius (1921–2011), *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
66. **Antanas Laurinčikas**, Rymano ir Hurvico dzeta funkcijų jungtinis universalumas, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
67. Žilvinas Ledas, Kompiuterinis švytinčių bakterijų struktūros formavimosi tirpale modeliavimas, *Fizinių ir technologijos mokslų tarpdalykiniai tyrimai: antroji LMA Jaunųjų mokslininkų konferencija, Vilnius, 2012 02 14*.
68. **Remigijus Leipus, Jonas Šiaulys**, Closure at heavy–tailed distribution classes under random convolution, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
69. **Remigijus Leipus, Jonas Šiaulys**, Large deviations for loss process in a customer-arrival-based insurance risk model, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
70. **Remigijus Leipus, Jonas Šiaulys**, Closure at heavy–tailed distribution classes under random convolution, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
71. **Remigijus Leipus, Jonas Šiaulys**, Large deviations for loss process in a customer-arrival-based insurance risk model, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
72. **Antanas Lenkšas, Vigirdas Mackevičius**, Models of Financial Mathematics. Weak approximations by discrete random variables, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
73. Karol Lisovskij, **Aistis Raudys**, Lukas Sirvydis, Synthetic history for exchange traded funds, *Lecture Notes in Business Information Processing*, 117, p. 224–235.
74. **Vigirdas Mackevičius**, Moments of stochastic Verhulst equation, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
75. **Eugenijus Manstavičius**, An analytic approach in probabilistic combinatorics, *Elementare und Analytische Zahlentheorie, 2012 August 13–18, Germany*, p. 24–25.
76. **Eugenijus Manstavičius**, Robertas Petuchovas, Atsitiktinių struktūrų komponentų vektorių skirstinių aproksimavimas pilnosios variacijos metrikoje, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.

77. **Jurgita Markevičiūtė**, Silpnas didžiųjų skaičių dėsnis beveik nestacionariems pirmos eilės autogresiniams procesams funkcinėse erdvėse, *Fizinių ir technologijos mokslų tarpdalykiniai tyrimai: antroji LMA Jaunųjų mokslininkų konferencija, Vilnius, 2012 02 14*.
78. **Jurgita Markevičiūtė, Alfredas Račkauskas, Charles Suquet**, Limit theorems for nearly non-stationary processes and applications to the epidemic change detection, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
79. **Gintautas Misevičius**, Naujų formų konvergavimas analizinių funkcijų erdvėje, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
80. **Antanas Mitašiūnas, Saulius Ragaišis**, Electronic documents interoperability solutions in academic environment, *Education, sport and tourism in the prosperous epoch of powerful state: abstracts of international exhibition and scientific conference, 2012 November 5–7, Asgabat*, p. 223–225.
81. **Gediminas Murauskas, Marijus Radavičius**, Studijų informacinės sistemos vartotojų duomenų sijos, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
82. **Kazimieras Navickis**, Affine differential geometry of osculating hypersurfaces, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
83. **Židrina Pabarškaitė, Aistis Raudys**, Discrete portfolio optimisation for large scale systematic trading applications, *IEEE Biomedical Engineering and Informatics (BMEI), 2012 5th International Conference on, Chongqing*, p. 1566–1570.
84. **Vyngantas Paulauskas, Marijus Vaičiulis**, A generalization of the Hill estimate, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
85. **Konstantinas Pileckas**, On Leray's problem for the stationary Navier–Stokes equations with nonhomogeneous boundary values, *7th European Conference on Elliptic and Parabolic Problems, May 21–25, Italy*.
86. **Konstantinas Pileckas**, On one J. Leray's problem in the theory of Navier–Stokes equations, *Mathematical Aspects of Hydrodynamics, August 12–18, Germany*.
87. **Donata Puplinskaitė, Donatas Surgailis**, Atsitiktinių laukų su begaline dispersija agregavimas, *Fizinių ir technologijos mokslų tarpdalykiniai tyrimai: antroji LMA Jaunųjų mokslininkų konferencija, Vilnius, 2012 02 14*.
88. **Donata Puplinskaitė, Donatas Surgailis**, Aggregation of random coefficient nearest–neighbor autoregressive random fields with infinite variance, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
89. **Alfredas Račkauskas, Aurelijus Tamulis**, Power analysis of Kolmogorov–Smirnov Dyadic Increments statistics, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
90. **Jovita Rašytė**, Diskretusis Hurvico dzeta funkcijų universalumas, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University*.
91. **Jovita Rašytė**, A discrete universality theorem for Hurwitz zeta–functions, *Abstracts of MMA 2012, June 6–9, 2012, Tallin, Tallin University of Technology*, p.99.
92. **Aistis Raudys**, Forecasting US, Equity Liquidity Seasonality, *Proceedings of IEEE International Conference on Pattern Recognition Applications and Methods, Vilamoura, Portugal, 6–8 February 2012, 2*, p. 380–386.

93. Šarunas Raudys, Aistis Raudys, Three decision making levels in portfolio management, *Proceedings of IEEE Conference on Computational Intelligence for Financial Engineering & Economics, New York, USA, 29–30 March 2012.*
94. Jurga Rukšėnaitė, **Pranas Vaitkus**, Neparimetrinių metodų taikymas prognozuojant makroekonominis rodiklius, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University.*
95. **Svajūnas Sajavičius**, Dvimatės parabolinės lygties su nelokaliosiomis integralinėmis sąlygomis sprendimas baigtinių skirtumų metodu, *Fizinių ir technologijos mokslų tarpdalykiniai tyrimai: antroji LMA Jaunujų mokslininkų konferencija, Vilnius, 2012 02 14.*
96. **Svajūnas Sajavičius**, Parallel solution schemes for quasi-tridiagonal linear systems arising after discrete approximations of ODEs/PDEs with nonlocal conditions, *AMAT 2012: international conference on applied mathematics and approximation theory: abstracts book, May 17–20, Turkey, p. 100.*
97. **Svajūnas Sajavičius**, The splitting finite-difference schemes for two-dimensional parabolic equation with nonlocal weighted integral conditions, *ECCOMAS 2012: 6th European congress on computational methods in applied sciences and engineering: proceedings, Vienna, September 10–14, p. 1–2.*
98. **Svajūnas Sajavičius**, “Optimization”, conditioning and accuracy of radial basis function method for two-dimensional Poisson equation with nonlocal conditions, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University.*
99. Mifodijus Sapagovas, **Olga Štikonienė**, On numerical solution for a class of elliptic equations with nonlocal conditions, *Mathematical modelling and analysis: 17th international conference, June 6–9, 2012, Tallinn, p. 1.*
100. **Jonas Šiaulys, Gediminas Stepanauskas**, The limiting discrete uniform law for distributions of additive functions, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University.*
101. **Jonas Šiaulys, Gediminas Stepanauskas**, Ribinis tolygus diskretus dėsnis adityviųjų funkcijų skirstiniams, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University.*
102. **Eugenijus Stankus**, Methodology of mathematics teachers training, *53rd Conference of Lithuanian Mathematical Society, June 11–12, 2012, Klaipėda University.*
103. **Eugenijus Stankus**, Challenges of mathematics teacher training programmes in Vilnius University, *13th international conference Teaching Mathematics: Retrospective and Perspectives, May 30–31, University Tartu, Estonia.*

RESEARCH GRANTS AND AWARDS

1. **Giedrius Alkauskas, Eugenijus Manstavičius**, Analytic, Combinatorial, and Dynamical Methods in Number Theory: Automorphic Forms, Discrete Structures, and Structure Constants, Postdoctoral fellowship, 2010–2012.
2. **Romas Baronas**, Developing Computational Techniques, Algorithms and Tools for Efficient Simulation and Optimization of Biosensors of Complex Geometry, European social fund measure VP1-3.1-SMM-07-K Global grant, <http://www.biomoda.mif.vu.lt/>.
3. **Algirdas Bastys, Algimantas Juozapavičius**, MD2T: Speech Recognition of Medical Diagnosis and Conversion to Text, MITA high-tech development programme, 2011–2013.
4. **Mindaugas Bloznelis, Valentas Kurauskas**, Random Graphs, RCL⁵ grant. 2011–2012.
5. **Vaidotas Characiejus, Martynas Manstavičius, Rimas Norvaiša, Alfredas Račkauskas**, Konkrečioji funkcinė analizė ir tikimybių teorija: nauji metodai ir jų taikymas, LMT mokslininkų grupių projektas Nr. MIP-53/2012.
6. **Ramūnas Garunkštis**, Skaičių teorijos analizinių funkcijų reikšmių pasiskirstymai, LMT mokslininkų grupių projektas, 2012–2014.
7. **Algimantas Juozapavičius**, LitGRID: Parallel and Distributed Computation and e-Services Network, 2007–2012.
8. **Remigijus Leipus, Donatas Surgailis**, Ilgos atminties ir sunkių uodegų modeliavimas finansuose ir draudoje, LMT mokslininkų grupių projektas MIP-11155, 2011–2012.
9. **Tadas Meškauskas, Gintaras Valinčius**, IMFAbite: Surface Tethered Bilayer Phospholipid Membranes for Functional Reconstitution of Proteins (MIP-096/2011), 2011–2012.
10. **Vygantas Paulauskas**, Statistical Decisions and Limit Theorems for Random Processes and Fields, RCL grant, 2011–2012.
11. **Konstantinas Pileckas**, Boundary Value Problems for Navier–Stokes System in Unbounded Domains, RCL grant No. MIP-30/2011, 2011–2012.
12. **Vladas Skakauskas**, Coupled Systems of Ordinary, Partial, and Integrodifferential Equations, RCL grant No. MIP-052/2012, 2012–2014.

⁵Research Council of Lithuania

SCIENTIFIC CONTACTS

PARTICIPATION IN INTERNATIONAL PROJECTS

1. Francesco Capozzi, Alminas Čivilis, Algimantas Juozapavičius, CHANCE: Cooperation–Theme 2: Food, Agriculture, Fisheries, and Biotechnology, FP7-KBBE-2010-4, 2011–2013, <http://www.chancefood.eu>.
2. Vytautas Čyras, Kristina Lapin, Secure, Trusted and Legally Ruled Collaboration Environment in Virtual Life (VirtualLife), <http://www.ict-virtuallife.eu>.
3. Valentina Dagienė, FETCH Future Education and Training in Computing: How to support learning at anytime anywhere. Project No. 539461-LLP-1-2013-1-BG-ERASMUS-ENW.
4. Valentina Dagienė, NNEER – Nordic Network of Engineering Education Research.
5. Sigitas Dapkūnas, Plan to Establish Research Science Enterprise Oriented Universities for the Benefit of Society. Project No. 145171-2008-ES-SMHES.
6. Algimantas Juozapavičius, ACERN: Lithuania Collaboration Project, 2007–2012.
7. Algimantas Juozapavičius, FP7 Project EGI-InSPIRE, 2010–2014.
8. Rimvydas Krasauskas, SAGA: FP7 Marie Curie Initial Training Network, 2008–2012.
9. Rūta Levulienė, CHANCE: Low Cost Technologies and Traditional Ingredients for the Production of Affordable, Nutritionally Correct Foods Improving Health in Population Groups at Risk of Poverty, project No. 266331, 2011–2013.
10. Eugenijus Manstavičius, Mathematics/Engineering Panel of European Research Agency, FP7, Marie Curie Actions, Programme “People”.
11. Jurgita Markevičiūtė, Vygantas Paulauskas, Alfredas Račkauskas, Statistical Inferences and Limit Theorems of Random Processes and Fields, Bilateral Lithuanian–France research program Gilibert, Vilnius and Lille Universities, 2011–2012.
12. Konstantinas Pileckas, Asymptotic Problems and Applications, Lithuanian–Swiss programme Research and Development, project No. CH-3-ŠMM-01/01, 2012–2016.

RESEARCH VISITS

1. Mindaugas Bloznelis, Taras Shevchenko National University of Kyiv, January 23–29.
2. Mindaugas Bloznelis, Adam Mickiewicz University, Poznan, November 25 – December 9.
3. Linas Bukauskas, CERN resource monitoring board meeting, Geneva, Switzerland, April 22–25.
4. Valentina Dagienė, Adger University, Kristiansand, Norway, February 27 – March 5.
5. Valentina Dagienė, University of Malta, February 19–23.

6. **Valentina Dagienė**, Basque Country University, Bilbao, Spain, April 1–6.
7. **Valentina Dagienė**, Aalborg University, Aalborg, Denmark, May 22–26.
8. **Valentina Dagienė**, Brunel University, London, UK, June 7–14.
9. **Valentina Dagienė**, University of Eastern Finland, Joensuu, Finland, November 15–18.
10. **Artūras Dubickas**, Lithuanian team leader at the 53rd International Mathematical Olympiad, Mar de Plada, Argentina, July 4–16.
11. **Rimantas Eidukevičius**, University of Padua, Italy.
12. **Kęstutis Karčiauskas**, SAGA final conference, Trento, Italy, October 4–7.
13. **Rimvydas Krasauskas**, SAGA final conference, Trento, Italy, October 4–7.
14. **Valentas Kurauskas**, University of Oxford, May 27–31.
15. **Valentas Kurauskas**, British–French workshop on Analytic Combinatorics, University Oxford, September 16–22.
16. **Valentas Kurauskas**, Adam Mickiewicz university, Poznan, November 25 – December 9.
17. **Virmantas Kvedaras**, Osaka University, Japan, May 16 – June 6.
18. **Virmantas Kvedaras**, Iseo Summer School in Economics, Iseo Institute, Italy, June 23–30.
19. **Virmantas Kvedaras**, Baltic Sea Summer School in International Economics, University of Southern Denmark, Denmark and Odense University, September 3–7.
20. **Remigijus Leipus**, Nantes University, France, January 15–28.
21. **Remigijus Leipus**, Malardalen University, Sweden. April 22–25.
22. **Remigijus Leipus**, Conference Statistical Modelling of Financial Data III, Graz University of Technology, Austria, May 22–26.
23. **Remigijus Leipus**, 6th European Congress of Mathematics, Krakow, Poland, July 1–7.
24. **Remigijus Leipus**, CREATES, Aarhus University, Denmark, September 19–22.
25. **Kęstutis Liubinskas**, Mälardalen University, Vestoros, Sweden, April 22–25.
26. **Martynas Manstavičius**, Mälardalen University, Vestoros, Sweden, April 22–25.
27. **Martynas Manstavičius**, 6th European Congress of Mathematics, Kraków University, Poland, July 1–7.
28. **Eugenijus Manstavičius**, Meeting of Council of the European Mathematical Society, Krakow, Poland, June 29 – July 8.
29. **Jurgita Markevičiūtė**, Cotutorial theses visit, Lille 1 University, France, February 1 – April 25.
30. **Gediminas Murauskas**, 18th EUNIS Congress, Vila Real, Portugal, June 19–23.
31. **Vygantas Paulauskas**, Georgia Institute of Technology, Atlanta, USA, March 12–25.
32. **Vygantas Paulauskas**, Warsaw University, April 16–21.
33. **Konstantinas Pileckas**, Institute of Mathematics, Polish Academy of Sciences, Poland, April 15–21.
34. **Konstantinas Pileckas**, Second University of Naples, Italy, May 16–20.
35. **Konstantinas Pileckas**, Jean Monnet University (Universit de Saint–Etienne), France, November 16–21.

36. **Konstantinas Pileckas**, University of Zurich, Switzerland, December 3–6.
37. **Aleksandras Plikusas**, Sampling Theory and Application Conference, Valmiera, Latvia, August 24–28.
38. **Donata Puplinskaitė**, Cotutorial theses visit, Nantes University, France, February 1 – April 25.
39. **Alfредas Račkauskas**, Gilibert Project visit, Lille 1 University, France, March 19–30.
40. **Aldona Skučaitė**, Mälardalen University, Vestoros, Sweden, April 22–25.
41. **Vytas Zacharovas**, Institute of Statistical Science, Academia Sinica, Taiwan, January 1–22.
42. **Vytas Zacharovas**, Institute of Statistical Science, Academia Sinica, Taiwan, August 28 – October 13.
43. **Vytas Zacharovas**, Institute of Statistical Science, Academia Sinica, Taiwan, December 19–31.
44. **Vaidotas Zemlys**, Spring course on Nonstationary Panel Time Series Methods, University of Coimbra, Portugal, March 22–25.
45. **Severinas Zubė**, SAGA final conference, Trento, Italy, October 4–7.

FOREIGN VISITORS

1. Prof. Andrzej Bargiela, University of Nottingham, UK. July 8–11, 2012.
2. Prof. Javier Bilbao, Universidad del Pais Vasco, Euskal Henriko Universitatea e Bilbao, Spain, May 27 – June 4.
3. Agnieszka Bojanowska, Warsaw University, Poland, October 4–9.
4. Dr. Philip Bonanno, University of Malta, Department of Mathematics, Science & Technical Education. September 29 – October 6.
5. Prof. Suquet Charles, Lille 1 University, France, October 27 – September 7.
6. Prof. Yurii Davydov, Lille 1 University, France, July 09–28.
7. Prof. Roman Jan Dwilewicz, Cardinal Stefan Wyszyński University, Poland, July 22–26.
8. Prof. Stefan Jackowski, Warsaw University, Poland, October 4–9.
9. Prof. Mikhail Korobkov, Novosibirsk State University, Russia. January.
10. Prof. Greg Lee, Taiwan University, Taiwan, May 27 – June 4.
11. Dr. Mattia Monga, University of Milano, Italy, December 03–07.
12. Prof. Grigori Panasenko, Jean Monnet University (Universit de Saint–Etienne), France. July.
13. Dr. Noa Ragonis, University of Haifa, Israel, December 03–07.
14. Prof. Remigio Russo, Second University of Naples, Italy. January.
15. Assoc. prof. Simonas Šaltenis, Aalborg University, Denmark. December 17–29, 2012.
16. Prof. Vsevolod Solonnikov, Steklov Institute of Mathematics, Russia. October.
17. Prof. Maciej Sysło, University of Torun, Poland, February 15–21.
18. Prof. Grzegorz Szafranski, University of Lodz, Poland.
19. Prof. Siichi Tani, Nikon University, Japan, May 27 – June 4.
20. Dr. Veikko Visala, Mikrolinna company, Hameenlinna, Finland, September 09–16.
21. Prof. Yang Yang, School of Mathematics and Statistics, Nanjing Audit University, January 14 – December 31.

NAME INDEX

- G. Alkauskas, 8, 10, 13, 19, 27, 34
A. Ambrazevičius, 5, 21, 24, 27
J. Andrikonis, 1, 13
A. Apynis, 4, 25
V. Ašeris, 11, 13, 21, 24, 27
- V. Bagdonavičius, 9, 13, 27
G. Bakštys, 7
G. Bareikis, 8, 13, 19, 26, 27
R. Baronas, 11, 13, 14, 19, 21, 24, 27, 28, 34
A. Bastys, 2, 34
E. Bieliauskienė, 14
A. Birštunas, 1, 21
M. Bloznelis, 8, 14, 28, 34, 35
A. Brilingaitė, 2
L. Bukauskas, 2, 35
L. Būtėnas, 2
- V. Čekanavičius, 6, 21, 28
D. Celov, 6
S. Černigova, 10, 19, 28
V. Characiejus, 6, 34
D. Čiukšys, 11
A. Čivilis, 2, 35
V. Čyras, 11, 21, 24, 28, 35
- V. Dagienė, 4, 21, 35, 36
P. Daniušis, 9, 14, 15
S. Dapkūnas, 11, 21, 35
V. Daukšas, 5
V. Dičiūnas, 1
L. Dindienė, 6, 28
A. Domarkas, 5
P. Drungilas, 10, 14, 21, 22
A. Dubickas, 10, 14, 22, 26, 28, 36
- R. Eidukevičius, 9, 14, 28, 36
A. Eismontaitė, 5, 24
A. Eljio, 4, 23, 24, 26–28
- E. Gaigalas, 4, 19
R. Garunkštis, 10, 15, 34
S. Gražulis, 8, 15
A. Grigutis, 10, 15
R. Grigutis, 8
- I. Grinis, 8, 24, 29
- J. Ignatavičiūtė, 2
F. Ivanauskas, 2, 13, 15, 24, 29
- V. Jančauskas, 1
A. Janeliūnas, 1
J. Jankauskas, 10, 14, 15, 21, 22
K. Janulis, 10, 15, 29
H. Jasiūnas, 10
A. Javtokas, 10
T. Jevsikova, 4, 22
A. Juozapavičius, 3, 24, 29, 34, 35
A. Juozulynas, 7
V. Jusevičius, 11
- A. Kačėnas, 10
J. Kalpokas, 10, 14, 15
R. Karaliūnas, 5
K. Karčiauskas, 3, 15, 29, 36
S. Kareiva, 3, 29
T. Kargina, 10, 22
E. Karikovas, 10
P. Kasparaitis, 3
R. Kašuba, 4, 24–26, 30
P. Katauskis, 5, 15, 22, 25, 30
K. Kaulakytė, 5, 15, 25, 30
A. Kavaliauskas, 5
V. Kazakevičius, 9, 15
N. Klovienė, 5, 16
K. Koncevičius, 2, 16
A. Korvel, 7
R. Krasauskas, 3, 14, 16, 30, 35, 36
A. Kregždė, 5, 22
J. J. Kruopis, 9
R. J. Kudžma, 4, 30
V. Kurauskas, 8, 28, 30, 34, 36
E. Kutka, 3
V. Kvedaras, 6, 16, 22, 36
R. Kybartas, 1, 22
- K. Lapin, 11, 21, 22, 35
R. Lapinskas, 6
A. Laurinčikas, 10, 13–16, 19, 20, 22, 24, 25,
28, 31

Ž. Ledas, 11
 R. Leipus, 6, 16, 17, 22, 31, 34, 36
 A. Lenkšas, 7, 31
 R. Levulienė, 9, 27, 35
 T. G. Lipnevičius, 3
 K. Liubinskas, 7, 36

 A. Mačiulis, 8, 13, 17, 19, 20, 27
 V. Mackevičius, 7, 31
 A. Maldeikienė, 6
 V. Maniušis, 6
 E. Manstavičius, 10, 17, 19, 20, 22, 25, 31, 34–36
 M. Manstavičius, 7, 34, 36
 R. Markauskas, 3, 29
 J. Markevičiūtė, 6, 17, 32, 35, 36
 M. Meilūnas, 5
 T. Meškauskas, 3, 15, 17, 34
 K. Mickus, 3
 E. Mielkaitis, 7
 S. Minkevičius, 11, 17
 G. Misevičius, 10, 23, 25, 26, 32
 I. Mitašiūnaitė-Besson, 1
 A. Mitašiūnas, 1, 19–21, 23, 32
 G. Murauskas, 6, 32, 36

 K. Navickis, 3, 23, 25, 32
 S. L. Norgėla, 1, 17, 25
 R. Norvaiša, 6, 34
 J. Novickij, 5, 29
 A. Novikas, 4, 10, 22, 23, 30

 G. Paukštaitė, 5, 25
 A. Paukštė, 2
 V. Paulauskas, 7, 13, 17, 21, 23, 32, 34–36
 S. Peldžius, 11, 20, 25
 K. Petrauskas, 11, 13, 17, 19, 20
 A. Pikturna, 3
 K. Pileckas, 5, 15–17, 32, 34–37
 T. Plankis, 11
 A. E. Plikusas, 7
 A. Plikusas, 37
 M. Puida, 3, 15, 17
 D. Puplinskaitė, 7, 32, 37
 G. Puriuškis, 5, 23

 A. Račkauskas, 6, 17, 32, 34, 35, 37
 I. Radavičius, 1
 M. Radavičius, 6, 32

 S. Ragaišis, 11, 20, 21, 23, 32
 V. Rapševičius, 3
 I. Rastenė, 6, 17
 J. Rašytė, 10, 16, 18, 32
 A. Raudys, 1, 20, 31–33
 Š. Raudys, 1, 20
 A. Reklaitė, 6
 Š. Repšys, 4

 S. Sajavičius, 3, 18, 23, 33
 P. Šarka, 10, 14, 18
 L. Savičienė, 11, 21, 23
 A. Šermokas, 11
 J. Šiaulys, 7, 14, 16–18, 20, 22, 23, 31, 33
 D. Šimelevičius, 14, 18
 J. Šiurys, 10, 18
 V. Skakauskas, 5, 15, 18, 22, 23, 25, 30, 34
 G. Skersys, 1
 V. Skorniakov, 9, 14, 18, 29
 A. Skučaitė, 7, 37
 M. Skujus, 5
 J. Šliogerė, 6
 V. Stakėnas, 8, 20
 E. Stankus, 4, 33
 G. Stepanauskas, 8, 20, 24–26, 29, 33
 A. Štikonas, 5, 25
 O. Štikonienė, 5, 18, 33
 A. Stočkus, 1, 21, 23

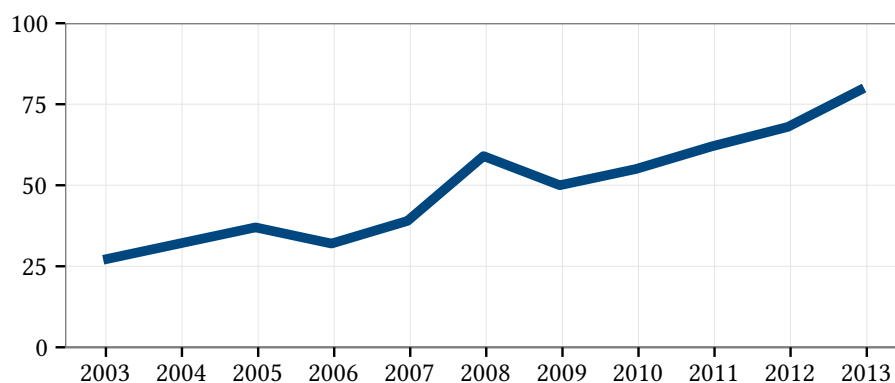
 J. Tamulienė, 3, 24, 25
 M. Tartėnas, 6
 V. Tumasonis, 2

 V. Undzėnas, 11

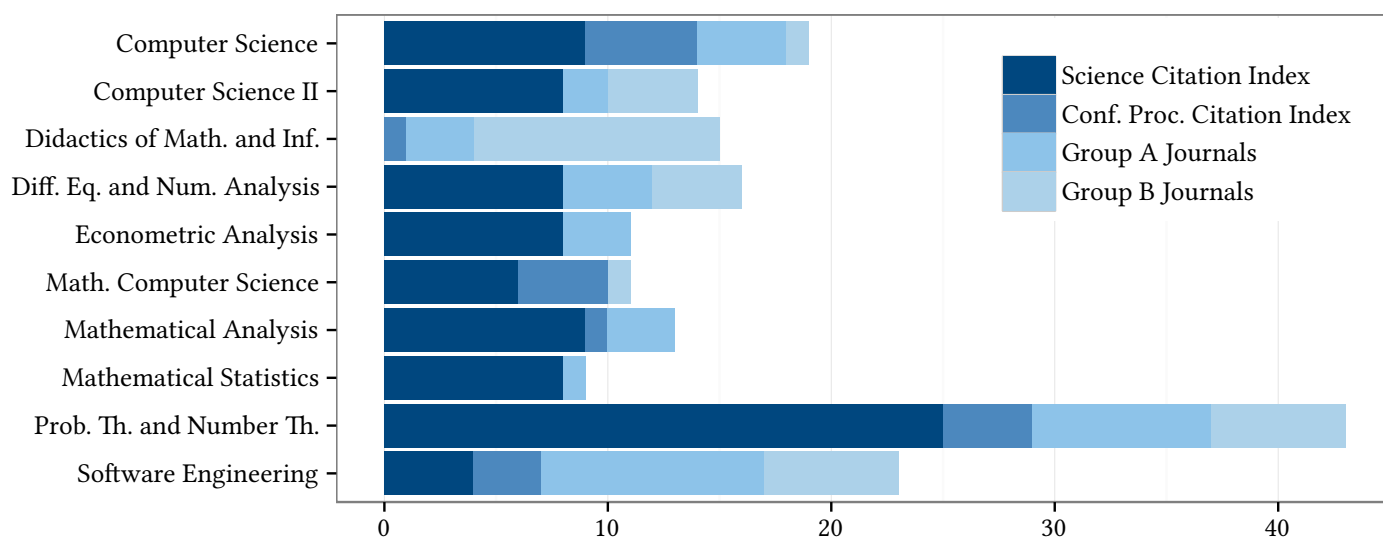
 R. Vaicekauskas, 2, 18, 19
 M. Vaičiulis, 9, 17, 18, 23, 32
 P. Vaitkus, 9, 18, 28, 33
 V. Valaitis, 2, 11
 P. Vitta, 2, 18, 19

 V. Zacharovas, 8, 37
 J. Žagūnas, 2
 V. Zemlys, 6, 16, 19, 37
 A. Žilinskas, 2
 Ž. Žilinskas, 10
 A. Zinevičius, 10, 23
 S. Zubė, 3, 30, 37
 L. Žvinytė, 8

NUMBER OF ARTICLES INCLUDED IN SCIENCE CITATION INDEX



NUMBER OF PUBLICATIONS IN 2012 BY DEPARTMENT



Publications Report 2012, compiled by Paulius Šarka