

VILNIAUS UNIVERSITETAS
MATEMATIKOS IR INFORMATIKOS
FAKULTETAS

VILNIUS UNIVERSITY
FACULTY OF MATHEMATICS
AND INFORMATICS

Research
and
Publications
Report
2008

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FACULTY OF MATHEMATICS AND INFORMATICS

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DEPARTMENT OF MATHEMATICAL ANALYSIS*

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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 towards 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.

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- V. Paulauskas.** Approximations of multidimensional stable laws. Autoregressive models. Random fields. Tail index estimation.
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Publications. Journals with ISI SC Index – 2; Intern. reviewed journals, books, and ISI proceedings – 2; Lithuanian licensed issues – 2; Other journals and proceedings – 2.

DEPARTMENT OF DIFFERENTIAL EQUATIONS AND
NUMERICAL ANALYSIS

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

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

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

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- Z. Žilinskas.** Doctoral student: Moments of additive functions defined on random combinatorial structures.

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DEPARTMENT OF MATHEMATICAL STATISTICS

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

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R. Paulauskas. Doctoral student.

V. Skorniakov. Doctoral student.

M. Vaičiulis. Statistical analysis of stochastic processes.

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

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

DEPARTMENT OF COMPUTER SCIENCE

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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.

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**DEPARTMENT OF DIDACTICS OF MATHEMATICS
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Publications. Journals with ISI SC Index – 1; Intern. reviewed journals, books, and ISI proceedings – 1; Lithuanian licensed issues – 4; Other journals and proceedings – 5.

DEPARTMENT OF COMPUTER SCIENCE II

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The research areas at the department include methods and applications of nonlinear and computational modeling, 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.

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A. Brilingaitė. Geo-context in location-based services, spatio-temporal databases, geographic information systems, and intelligent transportation systems.

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L. Bukauskas. Database support for visual data mining, indexing of visible objects, information retrieval, with the focus on disseminating database content on WWW, position oriented context retrieval in mobile service setting, spatio-temporal databases, and ER modeling.

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V. Rapševičius. Algorithms and models for data mining and pattern recognition in geology.

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`olgast@ktl.mii.lt`

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Publications. Journals with ISI SC Index – 12; Intern. reviewed journals, books, and ISI proceedings – 3; Lithuanian licensed issues – 4; Other journals and proceedings – 1.

DEPARTMENT OF SOFTWARE ENGINEERING

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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 modeling, information systems modeling, human-computer interaction, open queuing networks, message switching systems, computational modeling of physical-chemical processes, information security, electronic signature.

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Publications. Journals with ISI SC Index – 3; Intern. reviewed journals, books, and ISI proceedings – 6; Lithuanian licensed issues – 0; Other journals and proceedings – 0.

DEPARTMENT OF ECONOMETRIC ANALYSIS

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Head Prof. Alfredas Račkauskas

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Research areas of the department include financial econometrics; macroeconomics; 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.

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- D. Zuokas.** Testing epidemic change in mean and variance. danas.zuokas@mif.vu.lt

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

DEPARTMENT OF MATHEMATICAL COMPUTER SCIENCE

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Head Prof. Mindaugas Bloznelis

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Since 01 09 2008 Prof. Gediminas Stepanauskas

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

G. Bareikis. Distributions of the arithmetical functions.

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

HABILITATION PROCEDURES

1. **M. Radavičius**, Efficient and addaptive parametric and nonparametric estimators with applications, Institute of Mathematics and Informatics, Vilnius.
2. **E. Stankus**, Dirichlet L -functions and generalized numbers, Vilnius University.

DOCTORAL THESES

1. **D. Celov**. Time series aggregation, disaggregation and long memory. Advisor prof. **R. Leipus**.
2. **P. Drungilas**. Heights of Algebraic Numbers. Advisor prof. **A. Dubickas**.
3. **A. Klivečka**. The $GARCH(1, 1)$ model with random or time-varying coefficients. Advisor prof. **D. Surgailis**.
4. **B. Lapcun**. Modelling of the YAG synthesis. Advisor prof. **F. Ivanauskas**.
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PUBLICATIONS

Abbreviations:

LMR *Lietuvos Matematikos Rinkinys*
LMJ *Lithuanian Mathematical Journal**

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 3. **V. Dagienė** and T. Jevsikova, An exhibition of information technologies in education (London), *Electr. J. Veidrodis*, 2008-02-08.
 4. **V. Dagienė**, Deployment of information technologies into education in Lithuania, *Mokslas ir technika*, 2008, **8**, p. 22–23. 39.
 5. **V. Dagienė**, Informaticians gathered in Egypt, *Švietimo naujienos*, 2008, **15** (270), p. 12.
 6. **V. Dagienė** and I. Jonaitytė, Information technologies contest “Bebras” celebrates five-year anniversary, *Švietimo naujienos*, 2008, **19** (274), p. 12.
 7. **A. Dubickas**, Problems and solutions of Lithuanian mathematical olympiad 2008. <http://www.mif.vu.lt/~dubickas/files/dvifai/2008LM0.pdf>
- A. Elijio**, Can our fourth year pupils read?, *ŠAC*, Vilnius, 2008, 8 p.
- A. Elijio** (compiler), Examples of tests of reading literacy, *ŠAC*, Vilnius, 2008, 91 p.
- J. Dudaitė, **A. Elijio** (ed.), I. Mackevičienė, and V. Trublenkovaitė, Trends in International Mathematics and Science Study TIMMS, 2007, Report: 4th Grade, NEC, Ogamas, Vilnius, 2008, 82 p.
- J. Dudaitė, **A. Elijio** (ed.), I. Mackevičienė, and V. Trublenkovaitė, Trends in International Mathematics and Science Study TIMMS, 2007, Mathematics Report: 8th Grade, Ogamas, Vilnius, 2008, 58 p.
- J. Dudaitė, **A. Elijio** (ed.), I. Mackevičienė, and V. Trublenkovaitė, Trends in International Mathematics and Science Study TIMMS, 2007, Science Report: 8th Grade, Ogamas, Vilnius, 2008, 68 p.

8. **R. Kašuba**, The Jonas Kubilius VIII Christmas team-contest of Raseiniai region. *Kompiuterija*, 2008, bf1(125), p. 44.
9. **R. Kašuba**, The olympiad of Barbiera land, *Kompiuterija*, 2008, **2**(126), p. 44.
10. **R. Kašuba**, The olympiad of Plungė region, *Kompiuterija*, 2008, **5**(129), p. 46.
11. **R. Kašuba**, Echoes of competitions in Rietavas region, *Kompiuterija*, 2008, **9**(133), p. 46.
12. **R. Kašuba**, Eternal olympiad of Kompiuterija, *Kompiuterija*, 2008, **12**(136), 46–47.
13. **J. Kubilius**, Professor Zigmas Žemaitis. A short bibliographical outline, In book: *Zigmas Žemaitis. Bibliographical list and photo collection*, Vilnius University Publisher, 2008, 13–24.
14. **V. Paulauskas**, 65 years to Professor Donatas Surgailis, *Mokslas ir Technika*, 2008, **10**, 32–33.
15. **E. Stankus** and J. Šinkūnas, Progressions, In: *For a Young Mathematician 9: Problems and Solutions of Lithuanian School of Young Mathematicians 2006–2008*, Danielius Publishing House, Vilnius, 2008, 91–106.
16. **E. Stankus** and J. Šinkūnas, Formula of total probability. In: *For a Young Mathematician 9: Problems and Solutions of Lithuanian School of Young Mathematicians 2006–2008*, Danielius Publishing House, Vilnius, 2008, 58–69.

Other lectures and reports

1. **M. Bloznelis**, Vertex degree distribution and component evolution of random intersection graphs, *Adam Mickiewicz University, Poznań, Poland, February 26, 2008.*
2. **M. Bloznelis**, A wireless sensor network, *Connectivity, Bolzano University, Italy, July 7, 2008.*
3. **M. Bloznelis**, Power law random intersection graphs, *Carles University in Prague, Czech, November 19, 2008.*
4. **M. Bloznelis**, Power law random intersection graphs, *Helsinki University, Finland, December 8, 2008.*
5. **V. Čyras** and F. Lachmayer, Goal-Concept of e-Government, *Workshop "Technologie-gestütztes Wissensmanagement in der öffentlichen Verwaltung," Österreichische e-Government Konferenz 2008, May 27–29, 2008, Mautern an der Donau, Austria.*
<http://e-government.adv.at/2008/ProgrammEGovKonferenz20080529.htm>
6. **V. Čyras**, Distinguishing between knowledge visualization and knowledge representation in legal informatics, *Tagung zur Rechtsvisualisierung, November 13–14, 2008, Munich.*
<http://www.rwi.uzh.ch/oe/zrf/abtrv/konferenzen/2008/muenchen.html>
7. **E. Manstavičius**, Value distribution of additive functions defined on random combinatorial structures, *Institute of Statistical Sciences, Taiwan, Academia Sinica, December, 2008.*
8. **E. Stankus**, The interpretation of concepts of Probability Theory, *Seminar of Mathematics Teachers, November 28, Alytus Region Conference of Mathematics Teachers, Lazdijai, December 5, 2008.*
9. **E. Stankus**, On Vilnius University, *Seminar of Mathematics Teachers and VII Rietavas Mathematical Team Competition, December 13, 2008.*

SCIENTIFIC CONTACTS

Participation in international projects

1. **R. Baronas, S. Dapkūnas, V. Dičiūnas, K. Lapin, A. Mitašiūnas, S. Norgėla, S. Ragaišis, G. Skersys, V. Tumasonis, V. Undžėnas, R. Vaicekauskas.** EC Structural Funds project *Establishment of Master Study Programme in Software Engineering*. 2005–2008.
2. **V. Čyras, K. Lapin, S. Dapkūnas, L. Savičienė, T. Plankis.** Development of an Innovative LIDAR Technology for New Generation ATM Paradigms (SKY-Scanner), July 2007–June 2010. EC Sixth Framework Programme, thematic priority 1.4 Aeronautics and Space, specific targeted research or innovation project. Workpackage 9 Aircraft Collision Probability and Decision Support Model Design and Development. 2007–2010.
3. **V. Čyras.** EC Structural Funds Project No. BPD2004-ESF-2.5.0-03-05/027 *Development of doctoral studies in informatics and mathematics (InMaDra)*, 2006–2008. Partners: Kaunas Univ. of Technology and Institute of Mathematics and Informatics. Project is financed by the structural aid of the European Communities to Lithuania.
4. **V. Čyras, K. Lapin.** VirtualLife, EU FP7 project “Secure, Trusted and Legally Ruled Collaboration Environment in Virtual Life,” DG InfSo, theme 1.5 Networked Media, collaborative project - Small or medium scale focused research project (STREP), call FP7-ICT-2007-1. Coordinator NERGAL S.r.l, Italy, Jan. 2008–Dec. 2010.
5. **V. Dagienė.** Member of scientific committee of 9th Koli calling international conference on computing education research.
6. **V. Dagienė.** Member of the editorial board of the international journal of instruction (<http://www.e-iji.net>).
7. **A. Dubickas, Y. Bugeaud.** *Gilibert* project with Strasbourg University, No. SUT-441, *Algebraic Numbers and Distribution Modulo 1*. 2007–2008.
8. **A. Juozapavičius.** Activity leader. BalticGRID (EC, FPG, Contract No. 026715). 2005–2008.
9. **A. Juozapavičius.** Baltic GRID-II. (EC, FP7. Contract No. 223807). 2008–2010.
10. **A. Juozapavičius.** CERN-Lithuania Collaboration Program. 2008.
11. **R. Kašuba.** The international commission on mathematical instruction (ICMI) representative. <http://www.mathunion.org/ICMI>
12. **R. Kudžma.** Member of international programme committee and organizing committee of 9th international conference “Teaching Mathematics: Retrospective and Perspectives,” Vilnius Pedagogical University.

13. **R. Krasauskas**. FP7: Programme “People”, Marie Curie Action “Initial Training Networks”. 2008–2012.
14. **R. Leipus, A. Račkauskas**. Bilateral Lithuania–France research program *Gilibert*, project *Random Processes and Their Applications in Statistics and Econometrics*.
15. **M. Manstavičius**. Project *InMaDra*. Financial support by the ESF and Lithuania according to the Single Programming Document of Lithuania priority 2 “Human Resource Development” Measure 2.5 Ensuring that sufficient numbers of highly qualified specialists in the R& D sector and energy sectors are trained in order to stem the adverse impact of an ageing workforce in these sectors in particular.
16. **A. Mitašiūnas**. EC Structural Funds project *Establishment of Master Study Programme in Software Engineering* (**S. Norgėla, G. Skersys, V. Tumasonis, R. Vaicekauskas, V. Dičiūnas**). 2005–2008.
17. **A. Mitašiūnas**. Advisory Board member, author and reviewer of world-wide project Enterprise SPICE with participation of 107 experts from 29 countries and 5 continents.
18. **A. Mitašiūnas**. Participates in the BONITA project and leads WP3. BONITA is a new INTERREG 4B Project within the Baltic Sea Region and brings together Western and Eastern European expertise and competence in the field of research and innovation and contributes to strengthened regional cooperation and innovation transfer.
19. **A. Mitašiūnas**. Participates in the PERSEUS project as an international expert in cooperation between teaching and research, adapting university curricula to the needs of industry and business. The PERSEUS project aims to extend regional cooperation within higher education, research and business. This can imply strengthening relations between teaching and research, adapting university curricula to the needs of industry and business, and/or having businesses heighten investment in research.
20. **A. Mitašiūnas**. Represents the department in the Informatics Europe – association of computer science departments of universities and research laboratories, public and private, in Europe and neighboring areas. The mission of Informatics Europe is to foster the development of quality research and teaching in information and computer sciences.
21. **V. Paulauskas**. Bilateral Lithuania–France research program: *Gilibert*, project *Stochastic Processes and Their Applications in Statistics, Econometrics, and Industry*. Nr. LNS-12700-719, 2007-05-17, No. SUT-441. 2007–2008 (Vilnius and Lille Universities).
22. **V. Paulauskas**. Lithuanian State Science and Studies Foundation grant No

- V-02/2007 to support the research project *Stochastic Processes and their Application in Statistics, Econometrics, and Industry*. 2007–2008.
23. **A. Račkauskas**. EC Structural Funds Project No. BPD2004–ESF-2.5.0-03-05/0007 *Establishment of Master Study Programmes of Financial and Actuarial Mathematics and Econometrics*, 2006–2008.
 24. **Š. Raudys, I. Žliobaitė, R. Kybartas, and V. Dičiūnas**. A joint investigation with National Key Laboratory for Novel Software Technology, Nanjing University (People Republic of China) in a research project entitled “Simulation of risk and society security problems by analysis of sequences of chaotically changing rare almost catastrophic events”. 2008–2010.
 25. **A. Skučaitė**. Project “Baltic Mobility 2” sponsored by Estonian Ministry of Education and GERBERT RUF STIFTUNG fund. 2008.
 26. **A. Svirskas**. Consultant for the Scientific Coordination team (Kingston University, London) in an EU FP6 STREP project *Collaborative Process Automation Support using Service Level Agreements and Intelligent dynamic Agents in SME clusters* (codename PANDA). 2005–2008.
 27. **E. Stankus**. Member of the editorial board of the “Lietuvos matematikos rinkinys. Lietuvos matematikų draugijos darbai”.
 28. **E. Stankus**. Member of international programme committee of 9th international conference “Teaching Mathematics: Retrospective and Perspectives,” Vilnius Pedagogical University.
 29. **V. Tumasonis**. Taking part in Unicode Consortium for developing the Unicode Standard.

Visits by staff

1. **G. Bareikis**. Noszvaj, Hungary. June 14–22.
2. **V. Bagdonavičius**. Victor Segalen University, Bordeaux 2, Bordeaux, France. Visiting professor. January.
3. **R. Eidukevičius**. Padova University, Mahidol University, Bangkok, Thailand. A course on Statistics with Computer for students of the Faculty of Natural Sciences.
4. **M. Bloznelis**. Adam Mickiewicz University, Poznań, Poland. February 23–26.
5. **M. Bloznelis**. Bolzano University, Italy. Lectures by the Socrates/Erasmus program. July 3–10.
6. **M. Bloznelis**. Bielefeld University, Germany. September 9–20.
7. **M. Bloznelis**. Carles University in Prague, Czech, November 17–23.
8. **M. Bloznelis**. Helsinki University, Finland. December 4–31.
9. **V. Čekanavičius**. Institute for Mathematical Sciences, National University of Singapore, Research visit. January 3–February 22.
10. **V. Čekanavičius**. Institute of Statistical Sciences, Taiwan, Academia Sinica. December 4–22.
11. **V. Dagienė**. Staff training mobility visit to the enterprize “Lingonet Oy,” Department of Multimedia Development (Finland, Turku) under the Erasmus Programme of the Lifelong Learning Programm.
12. **V. Dagienė**. Staff training mobility visit to the Joensuu University Teacher Training School (Finland) under the Erasmus Programme of the Lifelong Learning Programm.
13. **A. Dubickas**. University of Genova, Italy. May 11–14.
14. **A. Dubickas**. Starsbourg University, France. Research visit within Gilibert program between Vilnius and Strasbourg Universities. June 2–8.
15. **A. Dubickas**. La Granja & Madrid, Spain. Lithuanian team leader at the International Mathematical Olympiad. July 10–22.
16. **V. Kvedaras**. Norway, Bergan International seminar. April 16–20.
17. **R. Leipus**. Copenhagen University, Aarhus University, Denmark. April 21–25.
18. **R. Leipus**. Paris, France. Conference “STATDEP.” June 03–07;
19. **R. Leipus**. Amsterdam, The Netherlands. 5th European Mathematical Congress. July 11–17.
20. **R. Leipus**. Nantes University, France. November 30– December 6.
21. **V. Mackevičius**. Universities Paris VI–VII, Laboratoire de Probabilités et Modèles Aléatoires. January 28–February 2.

22. **V. Maniušis.** Brussels, Belgium. EcoMod Modeling School. July 23–31.
23. **E. Manstavičius.** Luminy, International Research Center of Mathematics. Meeting of Presidents of National Mathematical Societies, April 24–28.
24. **E. Manstavičius,** Brussels, EC, Expertise work in Mathematics and Engineering Panel. October 6–11.
25. **E. Manstavičius,** Institute of Statistical Sciences, Taiwan, Academia Sinica. December 4–22.
26. **E. Manstavičius,** Visit to Paderborn University, FRG. The lecture held at the international colloquium dedicated to the 65th jubilee of Professor Karl-Heinz Indlekofer: “From additive semigroups to combinatorics. Collaboration experience with professor KARL-HEINZ INDLEKOFER.” January 9–13.
27. **V. Paulauskas.** Lille University, France. Conf. “Luminy.” May 19–31.
28. **V. Paulauskas.** Goteborg University. Sweden. March 26– April 1.
29. **A. Račkauskas.** Copenhagen University, Denmark. Research visit. April 21–25.
30. **A. Račkauskas.** Oberwolfach University, Germany. Conf. “The Mathematics and Statistics of Quantitative Risk Management”. March 16–23.
31. **A. Skučaitė.** Zurich ETH – part of project “Baltic Mobility 2,” sponsored by Estonian Ministry of Education and GERBERT RUF STIFTUNG fund. June 17–19.
32. **G. Stepanauskas.** Zürich University, Basel University, Switzerland. April 15–19.
33. **G. Stepanauskas.** Noszvaj, Hungary. June 14–22.
34. **G. Stepanauskas.** Barcelona, Spain. November 15–20.
35. **J. Šiaulyš.** Copenhagen University, Aarhus University, Denmark. April 21–25;
36. **D. Zuokas.** Brussels, Belgium, EkoMod Modeling School. July 13–20.
37. **V. Zemlys.** Brussels, Belgium, EkoMod Modeling School. July 13–20.
38. **I. Žliobaitė.** Bangor University, Wales. Project “Changing environments, a theoretical study.” May 8–July 31.

Foreign visitors

1. Prof. J. F. Boulicaut, in charge of a research group in Data Mining (INSA Lyon, France) visited Vilnius University. A presentation of the main research interest, work, and results of his group at the faculty of Mathematics and Informatics of Vilnius. Especially, he presented the framework of the “Inductive Databases” which is a new Knowledge Data Discovery approach developed within two FP7 European projects. February 24–27.
2. Prof. Y. Bugeaud, Strasbourg, France, Research visit, May.
3. Prof. Y. Bugeaud, Strasbourg, France, On the decimal expansion of algebraic numbers, September 5.
4. Prof. Y. Davydov, Lille University, France, September 20–28.
5. Prof. B. Jorgensen, University of Soufern , Denmark, November 25.
6. Prof. A. Philippe, Nantes University, France, September 20–28.
7. Prof. G. Samorodnitsky, Copenhagen University, Denmark, Cornell University, USA, November 16–20.
8. Prof. Ch. Samuels, Max-Planck-Institut für Mathematik, Bonn, Germany. The non-Archimedean metric Mahler measure, October 6.
9. Prof. C. J. Smyth, Edinburg University, Scotland. Integer symmetric matrices, Lehmer’s problem, and Salem numbers, September 4.
10. Prof. Ch. Suquet, Lille University, France, September 25–27.
11. Prof. D. Volny, Rouen University, France, September 25–27.

GRANTS, AWARDS

1. **G. Bareikis, M. Bloznelis, R. Grigutis, A. Mačiulis, V. Stakėnas, G. Stepanauskas.** Vilnius University Science Support Fund grant *Combinatorial and Probabilistic Analysis of Discrete Structures*. 2008.
2. **A. Bastys.** Automatic Voice Retrieval Technology. 2008.
3. **A. Juozapavičius.** GridTechno: Research and Implementation of Grid Applications Information Mobile Solutions. Lithuanian State Science and Studies Foundation grant, 2007–2009.
4. **A. Juozapavičius.** LitGRID: Parallel and Distributed Computation and e-Services Network. Financed by Ministry of Education and Science, investment program. 2007–2012.
5. **F. Ivanauskas.** Development of Bioelectrocatalysis for Synthesis and Analysis. 2008–2010 m.
6. **A. Skučaitė.** Grant covering participation fee in 21st Colloquium of Group Consultatif Actuariel Europeen “Solvable Solvency for Pensions?” (Den Haag, Netherlands, 2008 11 21).

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