DEPARTMENT OF MATHEMATICS
at UP IAM and UP FAMNIT
Report 2011

Famnit

IAM Univerza na Primorskem
Inštitut Andrej Marušič

CONTENTS

UNIVERSITY OF PRIMORSKA (UP)

The University of Primorska (Univerza na Primorskem Universita del Litorale; UP) was established by the Slovenian parliament on January 29, 2003 and was registered at the District Court of the city Koper on **3 March, 2003** thus becoming a legal entity.

The UP is a **public institution**, financed by the Slovenian Government. The activities of the UP are focused on offering **high-quality study programs, active inclusion of students in research work and researchers in teaching, and on internationally comparable achievements in the fields of research and education**.

Members of the University of Primorska:

- Faculty of Built Environment;
- Faculty of Humanities;
- Faculty of Management;
- Faculty of Mathematics, Natural Sciences and Information Technologies;
- Faculty of Education;
- Faculty of Tourism studies;
- Faculty of Health Care;

2 research institutes:
- Science and Research Centre;
- Andrej Marušič Institute;

- University Library;
- Students' Residence;

One associate member:
- College of Design Ljubljana.

International Cooperation

The UP strives to strengthen the international and cross-border cooperation and projects.
- Fields of project cooperation: Research, Education, Applied Sciences, Student and Faculty Mobility.
- Themes of project cooperation: Intercultural dialogue, Languages, Cultural heritage, History, Anthropology, Geography, Education, Sociology, Management, Tourism, Environment, Agriculture, Health, Mathematics, Informatics, Kinesiology and Ergonomics, etc.
- Partner institutions from: Austria, Croatia, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Lithuania, Netherlands, Norway, Poland, Spain, UK, etc.

The Faculty of Mathematics, Natural Sciences and Information Technologies (UP FAMNIT) was established by UP in the year 2006 for the purpose of balancing the social sciences with the natural sciences. The faculty is committed to integrating mathematics (the universal language of science) with computer science (the modern language of computation and information technology) into study programs which provide graduates of UP FAMNIT as well as UP with exceptional knowledge of these essential disciplines.

The faculty works closely with the Andrej Marušič Institute (UP IAM) to provide opportunities for research experience to students. The faculty is also benefiting and constantly improving from close collaboration with UP IAM through involvement in interdisciplinary research and exposure to current research. Nowadays it is not enough to excel in one field or sector - an interdisciplinary approach is needed. The fundamental questions that face humanity today are too complex to be answered through just one sector of expertise.

The faculty operates five departments:
- Department of Applied Sciences,
- Department of Biodiversity,
- Department of Information Sciences and Technologies,
- Department of Mathematics,
- Department of Psychology.

The total number of employees on the 31st of December, 2011, was: 25 teachers (14.36 FTE), 24 employees in higher education (16.18 FTE), 5 researchers (4.7 FTE) and 14 non-teaching employees (14.10 FTE), having UP FAMNIT as the main employer but also working at UP IAM.

Educational Activities

The first generation of students were enrolled in UP FAMNIT in the academic year 2007/08. In the current academic year (2011/12), the Faculty offers eight undergraduate university programs (BA), three Master (MS) and three PhD programs:

Undergraduate university programs (BA) (3 years):
- Mathematics
- Mathematics in Economics and Finance
- Computer Science
- Bioinformatics
- Biodiversity
- Biopsychology
- Mediterranean Agriculture
- Applied Kinesiology

Master's (MS) programs (2 years):
- Mathematical Sciences
- Computer Science
- Applied Kinesiology

Doctoral (PhD) programs (3 years):
- Mathematical Sciences
- Computer Science
- Applied Kinesiology

All courses/programs are designed in accordance with Bologna Declaration.

In the 2011/12 academic year, 559 students have been enrolled.

Research

Research data / indicators as of the 31st of December, 2011:
- The number of registered researchers: 70 (of which 1 was a young researcher).
- Average number of points according to the methodology SICRIS per registered researcher at ARRS in 2011 = 36.4 points,
- The effectiveness based on ARWU methodology - total number of published work of our researchers in journals that are indexed in databases SCI, SSCI and AHCI in 2011 = 67 publications,
- The average number of normalized citations per registered researcher (within the last 10 years) = 76.34 citations

International and inter-university cooperation

Teaching and research staff in the Faculty and Institute UP IAM work closely with international researchers and teachers who come from Bosnia and Herzegovina, Hungary, Italy, Serbia and USA. PhD students are from Bosnia and Herzegovina, Mexico, Russia, Serbia and elsewhere. The Faculty also has research links with Australia, Belgium, Canada, China, Israel, Italy, New Zealand, Norway, South Korea, USA and other countries. In recent years there has been a significant increase in the number of foreign students in particular at the PhD level. There are also some foreign students enrolled in the undergraduate level programs, mainly in Computer Science.

The Faculty organizes and co-organizes scientific conferences, and encourages active participation of teachers and staff at international scientific conferences, as well as their international activities in general. A particular emphasis is put on research collaboration with researchers from international institutions, short visits of international experts at UP FAMNIT both for research and teaching purposes, and sending our teaching and research staff to prestigious foreign universities. In this respect, particular attention is put on young employees.

ANDREJ MARUŠIČ INSTITUTE (UP IAM)
Muzejski trg 2, SI-6000 Koper, Slovenia
`info@iam.upr.si, www.iam.upr.si`

UP PINT (University of Primorska, Primorska Institute for Natural and Technical Sciences) was founded in 1999 as an independent public research institution and as such registered in the register of the District Court of Koper on the 27th of September 1999. On the 14th of October 2011 the UP PINT was renamed to the University of Primorska, Andrej Marušič Institute (UP IAM). As from this date the Institute legally operates under the new name (hereinafter referred to as UP IAM).

UP IAM carries out fundamental and applied research, is involved in international scientific cooperation, and establishes connections with similar organizations around the world, in line with its development program. With its researchers, habilitated teachers and assistants, UP IAM is involved in educational activities of the University of Primorska (UP) and cooperates with members and Associated members of the UP in designing proposals for new courses and new programs of UP, as well as in establishing new faculties.

Natural sciences and technology are foundations on which industry is based, therefore their high quality development is of strategic importance. In the UP, UP FAMNIT and UP IAM are responsible for development of natural sciences and technology. Both institutions are committed to making continuous efforts towards excellent work quality and to persisting in their efforts to move closer to the top of the scientific world. Being on top entails not only being successful within one field, but requires an excellent interdisciplinary performance, which involves working beyond traditional and sharp divisions among the basic areas of human science (natural sciences, technology, social sciences, and humanities). Basic questions of humankind are simply too complex to allow for answers only using tools or through the perspective of a single scientific discipline. Therefore, both institutions seek primarily to develop a single, uniform or linked science.

The research activities are organized into four research and development units: Department of Technology, Department of Mathematics, Department of Information Science and Technologies, and Department of Health Study.

Department of Information Science and Technologies conducts research on data structures, data mining, large-scale distributed GRID architectures, and other topics. At the Department of Mathematics research is carried out mainly in algebra, combinatorics and graph theory with probability theory. The core activity of the Department of Technology is environment protection and the technology associated with it. Department of Health Study operates in the field of mental health research (suicidology, psychology) and e-health.

Within the UP IAM operates the Center for Single Science and Development - POZNAR. UP IAM recognizes the need to integrate not only the natural sciences, technology and medical sciences but also art and social sciences. With its activity, POZNAR promotes and reinforces a unifying and unified approach to science as one integrated science.

MATHEMATICS DEPARTMENT AT UP IAM/UP FAMNIT

Mathematics Department at UP IAM/UP Famnit currently includes 41 faculty members:

Prof. DOBSON Edward
Prof. GRAVNER Janko
Prof. MALNIČ Aleksander, Director UP IAM
Prof. MARUŠIČ Dragan, Rector UP
Prof. PISANSKI Tomaž
Prof. POTOČNIK Primož
Prof. STEVANOVIĆ Dragan
Asoc. Prof. KOVÁCS István
Asoc. Prof. KUZMA Bojan
Asoc. Prof. MIKLAVIČ Štefko, Vice-rector for Research UP
Asoc. Prof. PERMAN Mihael
Assis. Prof. BOLDIN Barbara, Postdoc Researcher
Assis. Prof. JAKLIČ Gašper
Assis. Prof. KUTNAR Klavdija, Dean UP FAMNIT
Assis. Prof. MILANIČ Martin
Assis. Prof. OREL Marko
Assis. Prof. PAŠALIĆ Enes
Assis. Prof. ULE Aljaž
Assis. Prof. VITRIH Vito, Postdoc Researcher
Assis. Prof. ZGRABLIĆ Boris
Dr. ANCHOLCER Marcin, Postdoc Researcher
Dr. CICHACZ - PRZENIOSŁO Sylwia, Postdoc Researcher
Dr. HORVAT Boris
Dr. JERMAN Marjan
Dr. KAVKLER Iztok
Dr. LUKŠIČ Primož
Dr. MAČAJ Martin, Postdoc Researcher
Dr. ORBANIĆ Alen
Dr. RAIČ Martin
Dr. VERRET Gabriel, Postdoc Researcher
Dr. ZHANG Cui, Postdoc Researcher
ANTONČIČ Iva
BAJRIĆ Samed, Young Researcher
BERČIČ Katja, Young Researcher
FRELIH Boštjan, MSc
HUJDUROVIĆ Ademir, Young Researcher
KOIKE QUINTANAR Sergio Hiroki, Young Researcher
POČKAJ Karla, Young Researcher
POŽAR Rok, Young Researcher
TISNIKAR Viljem
VASILYEV Alexander, Young Researcher

In 2011 Bojan Kuzma received the Golden Plaque of UP.

In 2011 Martin Milanič was awarded the UP Research Excellence Prize.
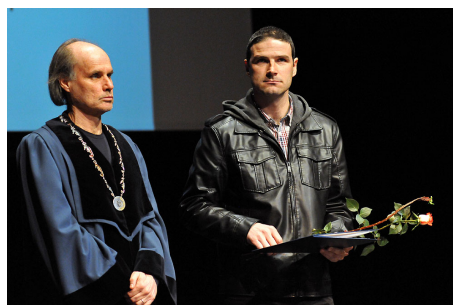
In 2011 Boštjan Frelih was awarded the UP Teaching Excellence Prize.

RESEARCH PROGRAMS

- 2008-2014: Algebra, Discrete Mathematics, Probability and Game theory; leader: Dragan Marušič
- 2008-2014: Computer Intensive Methods in Theoretical Computer Science, Discrete Mathematics, Combinatorial Optimization, Numerical Analysis and Algebra and their Applications in Natural and Social sciences; leader: Tomaž Pisanski

RESEARCH PROJECTS

- 2011-2014: Algebraic Graph Theory and Applications, leader: Dragan Marušič
- 2011-2014: GReGAS - Geometric Representations and Symmetries of Graphs, Maps and other Discrete Structures and Applications in Science, leader: Tomaž Pisanski
- 2011-2014: Bipartite Distance-Regular Graphs, leader: Štefko Miklavič
- 2011-2014: The Detection of Irregularities and Fraud in the Financing of the Public Health Services, leader: Primož Potočnik
- 2009-2012: On the Problem of Existence of Semiregular Elements in 2-closed Transitive Groups with Application in Vertex-transitive Graphs, leader: Dragan Marušič
- 2011-2013: Hamilton cycles in Vertex-transitive Graphs, Postdoc project, leader: Klavdija Kutnar
- 2011-2013: PH Curves and their Generalizations, Postdoc project, leader: Vito Vitrih
- 2010-2012: Mathematical Studies of Infectious Disease Dynamics, Postdoc project, leader: Barbara Boldin

BILATERAL PROJECTS lead by Math Department 2011 – to date

- S-rings and their Applications in Algebraic Graph Theory and Finite Geometry: bilateral scientific - research cooperation between Slovenia and the Russian Federation (2010-2011), UP IAM and St. Petersburg Department of V. A. Steklov Institute of Mathematics of the Russian Academy of Sciences.
- Transitive Group Actions with Applications in Combinatorics: bilateral scientific - research cooperation between Slovenia and the Republic of China (2009-2011), UP IAM and Beijing Jiaotong University.
- Semiregular Automorphisms in Vertex-transitive Graphs: bilateral scientific - research cooperation between Slovenia and USA (2009-2012), UP IAM and Mississipi State University.
- Bipartite Distance-regular Graphs: bilateral scientific - research cooperation between Slovenia and USA (2009-2012), UP IAM and University of Wisconsin - Madison.
- Hamiltonicity of Vertex-transitive Graphs: bilateral scientific - research cooperation between Slovenia and USA (2011-2012), UP IAM and Ohio State University.
- Algebraic Techniques for three Problems in Graph Theory: bilateral scientific - research cooperation between Slovenia and the Flemish Community and Flemish Region (2011-2012), UP IAM and Free University Brussels.
- Algebraic, Topological and Algoritmic Methods in the Classification of Discrete Structures: bilateral scientific - research cooperation between Slovenia and the Slovak Republic (2011-2012), UP IAM and Katedra informatiky, FMFI, Univerzita Komenskeho (Jan Bod'a).
- Research cooperation Slovenia - Australia: The Existence of Semiregular Elements in

- the Permutation Groups (2011), UP IAM and University of Western Australia, The University of Newcastle, University of Melbourne.
- Research cooperation Slovenia - Israel: Schur Rings, Coherent Configurations and Association Schemes (2011), UP IAM and Netanya Academic College.
- Research cooperation Slovenia - Israel: Clique-independent Sets and Graph Classes (2011), UP IAM and Ariel University Center of Samaria.
- Research cooperation Slovenia - Canada: Hamiltonian Cycles in Cayley Graphs (2011), UP IAM and University of Lethbridge.
- Research cooperation Slovenia - Mexico: Moore Graphs and Cages (2011), UP IAM and National University of Mexico.
- Research cooperation Slovenia - New Zealand: Half-arc-transitive graphs (2011), UP IAM and University of Auckland.
- Research cooperation Slovenia - Spain: Strongly Regular (Di)graphs (2011), UP IAM and University of the Basque Country.
- Research cooperation Slovenia - Canada: The Graph Symmetry (2011), UP IAM and York University.
- Research cooperation Slovenia - Bulgaria: Tempus course "Algebraic Combinatorics, Computability and Complexity" (2011), UP IAM and Postgraduate School in Sofia, Bulgaria.
- Geometries, Graphs, Groups and their Links II: bilateral scientific - research cooperation between Slovenia and the Republic of Hungary (2011-2012), UP IAM and University of Pecs.
- Strongly Regular (Di)graphs: bilateral scientific - research cooperation between Slovenia and USA (2012-2013), UP IAM and Worcester Polytechnic Institute.
- Numerical Characterizations of Graph Theoretic Properties: bilateral scientific - research cooperation between Slovenia and USA (2012-2013), UP IAM and Rutgers Center for Operations Research.
- Algebraic Aspects of Symmetry in Topology and Combinatorics: bilateral scientific - research cooperation between the Republic of Slovenia and the Republic of Korea (2011-2012), UP IAM and POSTECH.
- The research cooperation between the Republic of Slovenia and India (2011-2013), UP IAM - Department of Mathematics Indian Institute of Technology Roorkee.
- Schurian and Separable Schur Rings: bilateral scientific - research cooperation between the Republic of Slovenia and the Russian Federation (2012-2013), UP IAM and St. Petersburg Department of Steklov Institute of the Russian Academy of Sciences.
- Mathematical Models of Evolutionary Dynamics of Infectious Diseases with Different Modes of Transmission: bilateral scientific - research cooperation between Slovenia and Finland (2012-2013), UP IAM and Department of Mathematics and Statistics, University of Helsinki.
- Graph Width Parameters and Graph Powers: bilateral scientific - research cooperation between Slovenia and Argentina (2012-2013), UP IAM and Universidad Nacional de La Plata.

Ars mathematica contemporanea is publishing high-quality articles in contemporary mathematics that arise from the discrete and concrete mathematics paradigm. It favors themes that combine at least two different fields of mathematics. In particular, it welcomes papers intersecting discrete mathematics with other branches of mathematics, such as algebra, geometry, topology, theoretical computer science, and combinatorics. The name of the journal was chosen carefully. Symmetry is certainly a theme that is quite welcome to the journal, as it is through symmetry that mathematics comes closest to art.

Founding Editors and Editors-in-Chief: Dragan Marušič and Tomaž Pisanski

ESF EuroGIGA GReGAS, 2011 - 2013
European Science Foundation
Graphs in Geometry and Algorithms
Geometric representations and symmetries of graphs, maps and other discrete structures and applications in science

Project leader: Tomaž Pisanski, Slovenia
Leading Organization: UP
PI countries: Croatia, Germany, Slovakia, Slovenia, Turkey
AP countries: Austria, Belgium, New Zealand, Israel, USA, UK

Principal Investigators:
Vladimir Batagelj, SI
Turker Biyikoglu, TUR
Sandi Klavžar, SI
Antoaneta Klobučar, CRO
Dragan Marušič, SI
Martin Škoviera, SK
Peter F. Stadler, GER

Associated Partners:
Leah Wrenn Berman, USA
Marston D. E. Conder, NZ
Patrick Fowler, UK
Wilfried Imrich, AUT
Mikhail Klin, IL
Dimitri Leemans, BE
Josef Leydold, AUT
Egon Schulte, USA

Tomaž Pisanski, Aigars Ekers (ESF representative), Dragan Marušič, Štefko Miklavič

Participating Organizations

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Algebraic Graph Theory Summer School 2011
June 26 - July 2, 2011, Rogla, Slovenia
http://www.famnit.upr.si/sl/konference/AGT2011

Number of participants: 80+

Organized by:
UP FAMNIT and UP IAM

in collaboration with:
IMFM - Institute of Mathematics, Physics and Mechanics
UL Pef - University of Ljubljana, Faculty of Education

Sponsors:
ARRS - Slovenian Research Agency
ESF EuroGIGA GReGAS - European Science Foundation, Graphs in Geometry and Algorithms, Geometric representations and symmetries of graphs, maps and other discrete structures and applications in science

Organizing Committee:
István Kovács, Klavdija Kutnar, Boštjan Kuzman, Aleksander Malnič, Dragan Marušič, Štefko Miklavič, Martin Milanič, Primož Šparl

The Summer School consisted of six minicourses (3-6 lectures):
- Group Actions, given by Cheryl E. Praeger (University of Western Australia, Australia), John Bamberg (University of Western Australia, Australia), Michael Giudici (University of Western Australia, Australia)
- Association Schemes, given by Mikhail Muzychuk (Netanya Academic College, Israel), Ilya Ponomarenko (St. Petersburg Department of V.A.Steklov Institute of Mathematics, Russia), Štefko Miklavič (UP)
- Magma, given by Marston Conder (University of Auckland, New Zealand)
- Hamiltonicity of Vertex-transitive Graphs, given by Dragan Marušič (UP) and Klavdija Kutnar (UP)
- Graph Covers and Appplications, given by Yan-Quan Feng (Beijing Jiaotong University, China) and Aleksander Malnič (UP & University of Ljubljana, Slovenia)
- Maps, given by Gareth Jones (University of Southampton, UK)

Bled'11 - 7th Slovenian International Conference on Graph Theory
June 19-25 2011, Bled, Slovenia
http://bled11.imfm.si

Number of participants: 280+

Organized by:
UP FAMNIT and UP IAM

in collaboration with:
DMFA Slovenija - Society of Mathematicians, Physicists and Astronomers of Slovenia
IMFM - Institute of Mathematics, Physics and Mechanics
UL Pef - University of Ljubljana, Faculty of Education

Sponsors:
ARRS - Slovenian Research Agency
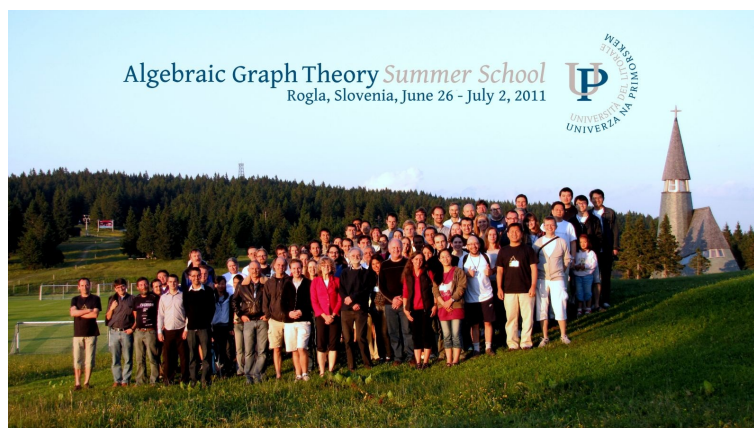MVZT RS - Ministry of Higher Education, Science and Technology, Republic of Slovenia
ESF EuroGIGA GReGAS - European Science Foundation, Graphs in Geometry and Algorithms, Geometric representations and symmetries of graphs, maps and other discrete structures and applications in science

Scientific Committee:
Sandi Klavžar, Dragan Marušič (chair), Bojan Mohar, Tomaž Pisanski

Organizing Committee:
Boštjan Kuzman, Klavdija Kutnar, Primož Šparl

Advisory Board:
Aleksander Malnič, Štefko Miklavič

Franci Demšar (Director of ARRS), Dragan Marušič, Sandi Klavžar, Aleksander Malnič

Keynote speakers:
Jonathan L. Gross (Columbia University, USA)
Richard Hammack (Virginia Commonwealth University, USA)
Wilfried Imrich (Montanuniversität, Austria)
Alexander A. Ivanov (Imperial College London, UK)
László Lovász (Eötvös Loránd University, Hungary)
Jaroslav Nešetřil (Charles University, Czech Republic)
Egon Schulte (Northeastern University, USA)
Tamǎs Szonyi (Eötvös Loránd University, Hungary)
Martin Škoviera (Comenius University, Slovakia)
Asia Ivić Weiss (York University, Canada)

Keynote Speakers and Scientific Committee

Invited speakers:

Leah Wrenn Berman (University of Alaska Fairbanks, USA)

Drago Bokal (University of Maribor, Slovenia)

Antonio Breda d'Azevedo (University of Aveiro, Portugal)

Boštjan Brešar (University of Maribor, Slovenia)

Matthias Dehmer (Vienna University of Technology, Austria)

Shaofei Du (Capital Normal University, China)

Isabel Hubard (Instituto de Matematicas, UNAM, Mexico)

Aleksandar Jurišić (University of Ljubljana, Slovenia)

Marcin Kamiński (Université Libre de Bruxelles, Belgium)

Joy Morris (University of Lethbridge, Canada)

Ilya Ponomarenko (Saint Petersburg Depart. of V. A. Steklov Institute of Math., Russia)

Douglas F. Rall (Furman University, USA)

Ingo Schiermeyer (Technische Universität Bergakademie Freiberg, Germany)

Peter Stadler (University of Leipzig, Germany)

Dragan Stevanović (University of Nič, Serbia)

Roberto Todeschini (University of Milano-Bicocca, Italy)

Xuding Zhu (Zhejiang Normal University, China)

Advisory Board and Organizing Committee

Research Mathematical Seminar in 2011
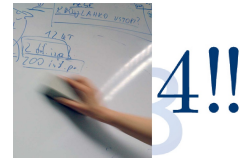
- 21/02/2011. Štefko Miklavič (UP): A problem from the theory of distance-regular graphs (Part I)
- 28/02/2011. Štefko Miklavič (UP): A problem from the theory of distance-regular graphs (Part II)
- 07/03/2011. Ademir Hujdurović (UP): Bipartite locally distance transitive graphs.
- 14/03/2011. Vito Vitrih (UP): High order parametric polynomial approximation of conic sections
- 21/03/2011. Boštjan Frelih (UP): Classification of cubic symmetric fivecirculants
- 28/03/2011. Martin Milanič (UP): Towards a combinatorial characterization of equistable graphs - partial results on a conjecture of Orlin
- 04/04/2011. Q.Sergio Hiroki Koike (UP): On isomorphism of cyclic Haar graphs.

- 18/04/2011. Alexander Mednykh (Sobolev Institute of Mathematics, Russia): Counting coverings and maps
- 09/05/2011. Ted Dobson (UP & Mississippi State University, USA): The isomorphism classes of all generalized petersen graphs
- 16/05/2011. Matjaž Kovše (University of Maribor and IMFM, Ljubljana): Steiner index of a graph
- 16/05/2011. Boštjan Brešar (University of Maribor and IMFM, Ljubljana) : Median graphs and algebras
- 23/05/2011. Anna Klymenko (UP): The Coxeter Graph
- 30/05/2011. Alexander Vasilyev (UP): Communicability Graph and Community Structures in Complex Networks
- 06/06/2011. Samed Bajrić (UP): Linear Cryptanalysis
- 13/06/2011. Ilya Ponomarenko (Petersburg Department of V.A.Steklov Institute of Mathematics, Russia): On quasi-thin association schemes
- 10/10/2011. Sergei Evdokimov (Petersburg Department of V.A.Steklov Institute of Mathematics, St. Petersburg, Russia): Characterization of Cyclic Schur Groups
- 07/11/2011. Sugata Gangopadhyay (Department of Mathematics at Indian Institute of Technology, India): Boolean functions in Cryptology.

- 14/11/2011. Martin Milanič (UP): Hereditary efficiently dominatable graphs
- 21/11/2011. Ademir Hujdurović (UP): Quasi m-Cayley graphs
- 28/11/2011. Štefko Miklavič (UP): Automorphism groups of the "Rose-window" graphs which are not edge-transitive.
- 19/12/2011. Primož Potočnik (UP, IMFM Ljubljana and University of Ljubljana): Group amalgams and locally arc-transitive graphs.

Seminar Coordinator: Štefko Miklavič

More: `http://www.famnit.upr.si/sl//seminarji`

Organized by:
UP FAMNIT

Organizing committee:
Bojan Kuzma
Martin Milanič
Vito Vitrih

Speakers:
Barbara Boldin, UP
Nastja Cepak, UP
Marija Jurkovič, UP
Pavel Fičur, UP
Boštjan Frelih, UP
Olga Kaliada, UP
Boštjan Kuzman, UL PeF
Dragan Marušič, UP
Martin Milanič, UP
Marko Orel, UP
Dragan Stevanović, University of Niš and UP
Vito Vitrih, UP

Famnitovi "Izleti v matematično vesolje", once a month.
Popularization of Mathematics.
More: http://izleti.famnit.upr.si/

Organized by:
UP FAMNIT and UP IAM

Coordinator:
Martin Milanič

Speakers:
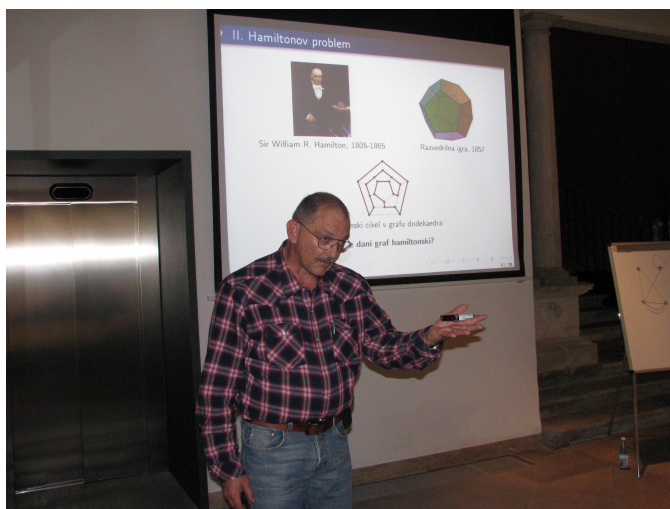Mihael Perman, UL Faculty of Mechanical Engineering and UP
István Kovács, UP
Dragan Stevanović, University Niš and UP
Aleksander Malnič, UL PeF
Dragan Marušič, UP; Rudi Bučar, musician
Andrej Brodnik, UP and UL FRI

Aleksander Malnič

Rudi Bučar

RESEARCH VISITS IN 2011

- Santa Clara University, Santa Clara, California, USA, January,
- UC Davis, Davis, California, USA, January,
- Ghent University, Ghent, Belgium, January,
- KU Leuven, Leuven, Belgium, January,
- Universite Libre de Bruxelles, Bruxelles, Belgium, January,
- Ohio State University, Columbus, Ohio, USA, January/February,
- Univerzita Komenskeho, Bratislava, Slovakia, March,
- Beijing Jiaotong University, Beijing, China, April,
- Charles University in Prague, Prague, Czech Republic, May,
- Vanderbilt University, Nashville, Tennessee, USA, May,
- Graz University of Technology, Graz, Austria, May,
- Moscow State University, Moscow, Russia, June - September,
- University of Wisconsin - Madison, Madison, USA, August - December,
- University of Salerno, Fisciano, Italy, September,
- University of Verona, Alba di Canazei, Italy, September,
- University of Auckland, Auckland, New Zeland, September - December,
- University of Amsterdam, Amsterdam, Netherlands, October,
- Ariel University Center of Samaria, Ariel, Israel, October/November,
- Netanya Academic College, Netanya in Ben-Gurion University of the Negev, Beer-Sheva, Israel, November,
- Mathematical Institute of the Academy of Sciences of the Czech Republic, Prague, Czech Republic, November/December,
- University of Newcastle, Newcastle, Australia, December,
- Yeungnam University, Kyongsan in Pusan University, Pusan, South Korea, December,
- University of Tuzla, Tuzla, Bosnia and Herzegovina, December,
- University of the Basque Country, Bilbao, Spain, December.

INVITED LECTURES IN 2011

- UC Davis, Davis, California, USA, January,
- Santa Clara University, Santa Clara, California, USA, January,
- Ghent University, Ghent, Belgium, January,
- KU Leuven, Leuven, Belgium, January,
- Universite Libre de Bruxelles, Bruxelles, Belgium, January,
- Ohio State University, Columbus, Ohio, USA, January/February,
- University of Niš, Niš, Serbia, February/May (Lecture Series: Discrete Mathematics),
- Eötvös Loránd University, Budapest, Hungary, March,
- Beijing Jiaotong University, Beijing, China, April,
- Graz University of Technology, Graz, Austria, May,
- UC Davis, Davis, USA, September,
- University of Salerno, Fisciano, Italy, September (Lecture Series: Structural and Algorithmic Graph Theory),
- University of Wisconsin - Madison, Madison, USA, September,
- Sofia University "St. Kliment Ohridski", Sofia, Bulgaria, October (Lecture Series: Algebraic Graph Theory),
- University of Amsterdam, Amsterdam, Netherlands, October - December (Lecture Se-

ries: Game Theory),

- California State University, Fresno, USA, November,
- Ben-Gurion University of the Negev, Beer-Sheva, Israel, November,
- Yeungnam University, Kyongsan, South Korea, December,
- University of the Basque Country, Bilbao, Spain, December (Lecture Series: Algebraic Graph Theory),
- University of Newcastle, Newcastle, Australia, December,
- University of Tuzla, Tuzla, Bosnia and Herzegovina, December.

CONFERENCE ATTENDANCES IN 2011

- Algebraic, Topological and Complexity Aspects of Graph Covers - ATCAGC'11 Kralova Studna, Slovakia, January, 1 invited speaker, 2 active participants,
- AMS Joint Meeting, New Orleans, USA, January, 1 invited speaker,
- 3rd International Conference on Matrix Methods in Mathematics and Applications Moscow, Russia, January, 1 plenary speaker,
- GGAM Mini Conference, Davis, USA, February, 1 invited speaker,
- 2011 International Conference on Groups, Graphs and Networks, Beijing, China, April, 1 invited speaker, 6 active participants,

UP FAMNIT/IAM group visiting Beijing Jiaotong University

- DIMAP Workshop on Combinatorics and Graph Theory, Warwick, Great Britain, April, 1 active participant,
- Dagsthul Seminar 11182 "Exploiting Graph Structure to Cope with Hard Problems", Schloss Dagstuhl, Germany, May, 1 active participant,
- 7th Slovenian International Conference on Graph Theory, Bled, Slovenia, June, 1 invited speaker, 6 active participants,
- CTW 2011 - "Cologne-Twente Workshop on Graphs and Combinatorial Optimization", Frascati, Italy, June, 1 active participant,
- 46th Czech-Slovak Conference on Graph Theory, Šachtičky, Slovakia, June, 1 invited speaker,
- The 26th Dubrovnik International Course & Conference on the Interfaces among Mathematics, Chemistry and Computer Sciences, Croatia, June, 1 active participant,
- Meeting Mathematics and Art, Ljubljana, Slovenia, June, 2 active participants,
- Eurogiga Kick-off Meeting, Paris, France, June, 1 active participant,
- Algebraic Graph Theory Summer School 2011, Rogla, Slovenia, June/July, 2 invited speakers, 4 active participants,
- Symposium "Teachers in the 20th Century", Aleksinac, Serbia, July, 1 active participant,

- CID 2011 Colourings, Independence and Domination, 14th Workshop on Graph Theory, Szklarska Poreba, Poland, September, 1 active participant,
- The 25th LL-Seminar on Graph Theory, Leoben, Austria, September, 1 active participant,
- ÖMG-TAGUNG - CSASC 2011, Krems, Austria, September, 3 active participants,
- Public Health in the 21st Century, Izola, Slovenia, September, 1 active participant,
- The 14th Fall Meeting of Health Economics Association, Lendava, Slovenia, October, 1 active participant,
- Workshop on Symmetry in Graphs, Maps, and Polytopes, Toronto, Canada, October, 1 plenary speaker, 3 invited speakers,

Workshop on Symmetry in Graphs, Maps, and Polytopes, Fields Institute, Toronto

- InfoKomTeh 2011, Ljubljana, Slovenia, November, 1 active participant,
- Meeting of Slovenian Hospitals Managers, Postojna, Slovenia, November, 1 active participant,
- VITEL, 26th Workshop on Telecommunications "Communications and Computers in a Cloud", Brdo, Slovenia, November, 1 active participant,
- The 35th Australasian Conference on Combinatorial Mathematics & Combinatorial Computing, Monash University, Melbourne, Australia, December, 1 active participant.

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2012 Math Meetings/Workshops organized by Math Department at UP FAMNIT & UP IAM

- **Graph Theory Semester, May - July 2012.**
  The Semester will consist of five minicourses (of 20 hours each) on Graph Theory led by Wilfried Imrich (University of Leoben, Austria), Gareth Jones (University of Southampton, UK), Elena Valentinova Konstantinova (Sobolev Institute of Mathematics, Russia), Adam Pawel Wojda (AGH University of Science and Techology, Poland), and Roman Nedela (Matej Bel University, Slovakia).
  More: `http://www.famnit.upr.si/sl/konference/SGT2012`

- **PhD Summer School in Discrete Mathematics, June 24 - 30, 2012.**
  The Summer School will consist of three minicourses (of six hours each): The Polycirculant Conjecture, led by Michael Giudici (University of Western Australia, Australia); Finite Geometries (from the definitions to some applications), led by György Kiss (Eötvös Loránd University); Graph Enumeration, led by Stephan Wagner (Stellenbosch University, South Africa).
  More: `http://www.famnit.upr.si/sl/konference/DM2012`

- **Symmetries of Graphs and Networks III, June 24 - 30, 2012.**
  Invited Speakers: Jin Ho Kwak (Pohang University of Science and Technology, South Korea); Young Soo Kwon (Yeungnam University, South Korea); Joy Morris (University of Lethbridge, Canada); Roman Nedela (Matej Bel University, Slovakia); Tamas Szonyi (Eötvös Loránd University); Norbert Seifter (University of Leoben, Austria); Jozef Širáň (Slovak University of Technology, Slovakia); Paul Terwilliger (University of Wisconsin-Madison, USA); Steve Wilson (Northern Arizona University, USA).
  More: `http://www.famnit.upr.si/sl/konference/DM2012`

- **Computers in Scientific Discovery 6, August 21 - 25, 2012.**
  Keynote Speakers: Nobelist Harold Kroto (Florida State University, USA) (not confirmed); Oswin Aichholzer (University of Technology Graz, Austria); Alexandru Balaban (Texas A&M University at Galveston, USA); Gunnar Brinkmann (Universiteit Gent, Belgium); Arnout Ceulemans (K.U.Leuven, Belgium); Ernesto Estrada (University of Strathclyde, UK); Patrick Fowler (University of Sheffield, UK); Ante Graovac (University of Split, Croatia); Adalbert Kerber (University of Bayreuth, Germany); Bojan Mohar (Simon Fraser University, Canada & IMFM, Slovenia); Milan Randić (National Institute of Chemistry, Slovenia); Dragan Stevanović (University of Niš, Serbia & UP); Ian Wanless (Monash University, Australia); Jure Zupan (National Institute of Chemistry, Slovenia).
  More: `http://www.csd6.si`

- **Summer Math Camp "Matematika je kul", August 26 - September 1, 2012.**
  Summer School for High School students.
  More: `http://tabor.famnit.upr.si/`

- **Research Mathematical Seminar, each Monday.**
  More: `http://www.famnit.upr.si/sl//seminarji`

- **Famnitovi "Izleti v matematično vesolje", once a month.**
  Popularization of Mathematics.
  More: `http://izleti.famnit.upr.si/`