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<u>4. Department of Mathematics and Computer Science,</u> <u>Hungarian line</u>

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The Superior Dacia University, King Ferdinand I University, University of Cluj Napoca is the most important university of Transylvania, from November 3, 1919 when was set up by King Ferdinand I. The Babes-Bolyai University offers study programmes in Romanian, Hungarian, German, English, and French. The university was named after prominent scientists from Transylvania: the Romanian bacteriologist Victor Babes and the Hungarian mathematician János Bolyai.

In 1959, the Communist authorities decided to merge the two universities into one, named Babeş-Bolyai University, with teaching in both language. The university is now the most diversified and the most complex higher education institution in Romania, Babeş-Bolyai University has more than 40,000 students. The structure of the student body is composed out of over 2,500 Ph.D. students, 8500 master's degree students, and 30,000 undergraduates. The university has 21 faculties and over 1,400 faculty members. It offers bachelor's, master's, and Ph.D. degrees, along with advanced postgraduate studies.

In the 2011 URAP international ranking, the University was ranked first in Romania based on top academic indicators.

In the 2012 QS World University Rankings, it was included in Top 700 universities of the world.



Faculty of Mathematics and Computer Science



The Faculty of Mathematics and Computer Science is today a fortunate blend of tradition, experience and modernity in a large and prestigious University.

The Computer Science is undeniably the science of the present and, beyond all questions, of the future as well. The number of students attending the courses in this branch has rapidly increased and it is with absolute certainty that the graduates of Computer Science study programs can compete fearlessly and deeply confidently on the international labour market of Information Technology.

There are generations of graduates of Mathematics and Computer Science study programs, spread all over the country and in the whole world, who work for prestigious schools, for strong IT companies, or in different fundamental and applied research fields in universities or research institutes from Romania, Western Europe or United States.



Foreword/Welcome from the Dean of the faculty



he Faculty of Mathematics and Computer Science is, in our opinion, a fortunate blend of tradition, experience

and modernity in a large and prestigious University. On one hand, it is known that all that was discovered in Mathematics along the centuries, even since the times of the ancient Egyptians, Arabians and Greeks, all that Euclid. Pythagora. Euler or Poincaré stated as mathematical truth. remained as such. None of these became obsolete: the subsequent discoveries did not revoke anything from Mathematics which kept on developing unceasingly. The Faculty of Mathematics and Computer Science from Babes-Bolyai University Cluj-Napoca relies on and draws its vigour from a whole school of famous names that starts with M. Hell, F. Riesz, L. Fejer, Gy. Farkas, D. Pompeiu, P. Sergescu, Gh. Bratu, Th. Anghelută and proceeds with G. Călugăreanu, T. Popoviciu and

D.V. Ionescu, F. Rado, to mention only a few important scientists and professors. Today, with more than 500 students, enrolled in Bachelor study programs (in Mathematics and Mathematics-Computer Science) and in Master programs (Applied Mathematics and Didactic Mathematics) and with a very strong research activity (mainly in Algebra and in Applied Analysis), the Department of Mathematics try to maintain at a high level a successful scientific and professional activity. On the other hand, the Computer Science is undeniably the science of the present and of the future as well. The number of students attending the courses in this branch has rapidly increased (today are more than 1200) and, more than that, the graduates of Computer Science study programs (both in Romanian and in English) are extremely competitive on the international labour market of Information Technology. The cooperation agreements between the faculty and a lot of IT companies from Cluj-Napoca and from abroad and a fruitful scientific activity are powerful evidences of the central position of our Department of Computer Science in this field. A very important component of the

Foreword/Welcome from the Dean of the faculty

scientific and didactic activity of the faculty is the Hungarian line of study. The Department of Mathematics and Computer Science of the Hungarian line of study coordinates three Bachelor programs (in Mathematics, Mathematics-Computer Science and Computer Science) as well as, three Master programs (both in Mathematics and in Computer Science) with more than 600 students.

The Doctoral School of Mathematics and Computer Science is another important component of our scientific life. With 18 Ph.D. supervisors, both in Mathematics and Computer Science, and with more than 80 Ph.D. Students, the Doctoral School has today a very strong position at the national level. At the same time, both Mathematics and Computer Science from Babes-Bolyai University have at their disposal a wide range of dependable technical and managerial facilities such as highly endowed laboratories, well equipped libraries, modern academic and research programmes, profitable international cooperation. Cluj-Napoca is known as the born place of János Bolyai, Transylvanian mathematician,

known for his work in non-Euclidean geometry. Bolyai's work was published in 1832 as an appendix to a math textbook by his father Farkas Bolyai. Independently from János Bolyai, N.I. Lobachevsky published in 1929 a similar work on non-Euclidean geometry. Today, these essential contributions are known as Bolyai-Lobachevsky geometry. Of course, we are proud today that the name of our university contains the name of this very famous mathematician. Cluj-Napoca is today the second largest city in Romania situated in the northwestern part of the country. Geographically, it is roughly equidistant from Bucharest (441 km), Budapest (409 km) and Belgrade (465 km). Located in the Someşul Mic River valley, the city is considered the unofficial capital to the historical province of Transylvania. The past history of Transylvania is strongly connected to the myth of count Dracula, a legend promoted by Bram Stoker's well-known novel. The source of inspiration of the novel seems to be the figure of a Romanian voivode, "Vlad the Impaler", ruler of Vallachia, who was born in Sighişoara, a nice historical town in Transylvania.



Managament & Departments

Dean and Vice-deans

Dean	Prof. PhD. Adrian PETRUŞEL
Vice-deans	Assoc.Prof. PhD. Simona MOTOGNA Assoc.Prof. PhD. ROBU Judit Lect. PhD. Marcel Adrian ŞERBAN

Senate Members

Prof. PhD. Dumitru DUMITRESCU		
Prof. PhD. Horia F. POP		
Prof. PhD. Radu PRECUP		
Assoc.Prof. PhD. Septimiu CRIVEI		
Lect. PhD. ANDRÁS Szilárd-Károly		
Student Gheorghe POP, master studies		



Managament & Departments

Faculty Council (2012-2016)

	Prof. PhD. Agratini Octavian				
	Lect. PhD. Andras Szilard-Karoly				
	Lect. PhD. Andreica Anca				
	Lect. PhD. Bodó Zalán				
	Lect. PhD. Bufnea Darius				
	Assoc.Prof. PhD. Chiorean Ioana				
	Assoc.Prof. PhD. Crivei Septimiu				
	Assoc.Prof. PhD. Csató Lehel				
	Prof. PhD. Czibula Gabriela				
	Lect. PhD. Darabant Sergiu Adrian				
Teaching	Prof. PhD. Mărcuş Andrei				
staff	Assoc.Prof. PhD. Motogna Simona				
	Prof. PhD. Pârv Bazil				
	Prof. PhD. Petruşel Adrian				
	Prof. PhD. Pop Horia-Florin				
	Assoc.Prof. PhD. Popovici Nicolae				
	Assoc.Prof. PhD. Robu Judit				
	Assoc.Prof. PhD. Szenkovits Ferenc				
	Assoc.Prof. PhD. Soos Anna				
	Lect. PhD. Săcărea Christian				
	Lect. PhD. Sterca Adrian				
	Lect. PhD. Şerban Marcel				
	Lect. PhD. Vancea Alexandru				



Managament & Departments

Faculty Council (2012-2016)

	Chiorean Bogdan Mihai, Computer Science Romanian III, representing NGOs				
	Ghele Diana Georgiana, Computer Science English III				
	Kelemen Fejer Balint, Computer Science Hungarian III				
Students	Migea Alin Vasile, Computer Science Romanian I				
	Miron Raluca Madalina, Master I				
	Popa Ileana, Master I				
	Urs Cristina, PhD student				
	Vultur Paula Lavinia, Mathematics and Computer Science Romanian II				



Academic programmes

Undergraduate Programmes:

Domain Computer Science: Computer Science (In Romanian,

Hungarian, and English)

 Domain Mathematics: Mathematics, Mathematics Computer Science (in Romanian, and Hungarian)

Master's Programmes:

- · Domain Mathematics:
 - o Mathematics (in Romanian)
 - o Applied Mathematics (in Romanian)
 - o Didactic Mathematics (in Romanian and Hungarian)
 - o Computational Mathematics (in Hungarian)
- Domain Computer Science:
 - o Databases (in Romanian)
 - o Distributed Systems in Internet (in Romanian)
 - o Software Engineering (in English)
 - o Component-Based Programming (in English)
 - o Modelling and Simulation (in English)
 - o Intelligent Systems (in English)
 - o Optimization of Computational Models(in Hungarian)

Doctoral Programmes:

Doctoral School in Mathematics and Computer Science





Undergraduate Programs

Computer Science

Labor market demands highly qualified computer science professionals. This programme offers a coherent approach by combining theoretical knowledge with modern technologies and practical work. The curricula is build using the paradigm "scientistpractitioner", being inspired from other European computing science programmes, thus ensuring the compatibility of studies in the European Higher Education Area. What is more the undergraduate programme in Computer Science provides the students with the appropriate knowledge and tools for further master degree studies and/or for their professional activity in IT, education, administration, industry or finance and this program is taught in three languages, English, Romanian and Hungarian

Mathematics

The programme's purpose is to provide the students with the capacity to understand and manipulate the basic concepts of fundamental mathematical structures, to transmit and value the studied knowledge and methods, to permanently learn, understand and apply the most recent scientific results and to understand and approach problems of mathematical nature from other sciences. Furthermore, this bachelor programme in Mathematics provides the students with the appropriate knowledge and tools for further master degree studies and/or for their professional activity in education, administration, industry or finance and is taught in Romanian and Hungarian languages.





Undergraduate Programs

Mathematics & Computer Science

The programme's purpose is to provide the students with the capacity to understand and manipulate the basic concepts and methods of fundamental mathematical structures, of fundamental programming and of software systems development and maintenance, to transmit and value the studied knowledge and methods, to permanently learn, understand and apply the most recent scientific results in Mathematics and Computer Science and to understand and approach, by mathematical and computing tools and methods, problems of mathematical nature from other sciences. Also, The bachelor programme in Mathematics Computer Science provides the students with the appropriate knowledge and tools for further master degree studies and/or for their professional activity in education, IT, administration, industry or finance and this program is taught in Romanian and Hungarian languages.





Mathematics Programe (in Romanian and English)

The Mathematics programme concentrates in the core areas of algebra, analysis, geometry and topology, but it also spills into some specialized themes of pure mathematics, in order to focus the students' knowledge on certain modern themes and to continue their training in modern fields of Mathematics. This programme emphasizes mathematics used in other sciences, in teaching and in new applications of pure mathematics (in computational mathematics, optimization etc) through seminars and case studies. The students will be prepared for either a Ph.D. degree or employment in industry or public service. Students who graduate this programme may activate in any institution or company of the economy and administration in positions requiring the ability to analyze, understand, approach and solve various practical problems whose solutions request a critical, creative and rigorous thinking.

As well, the holder of this programme may activate, in the condition of graduating the pedagogical module, as a teacher of Mathematics in any state or private educational institution at all levels.

Applied Matthematics (in Romanian and English)

Applied mathematics focuses on the creation and study of mathematical and computational tools broadly applicable in science and engineering, and on their use in solving challenging problems in these and related fields. From ecological modeling to mechanics, from statistical analysis to mathematical economics, areas of investigation are diverse. The Applied Mathematics master's program offers advanced theoretical knowledge in this complex and dynamic domain. The program was created to respond to the demand of specialists in mathematical modeling, numerical simulation and statistical analysis for various domains of science, economy and industry. Mathematicians and experts in mathematical modeling in: research, academic and educational institutes, banking system, industry and production companies.



Didactic Mathematics (in Romanian and Hungarian)

Teaching modern mathematics and carrying out various training programmes and methods; drawing up and assessing methods and textbooks for primary and lower secondary education; planning and evaluation of teaching/learning processes, as well as in research methods applied to modern mathematics. This Master Programme has the purpose of broadening the horizon of knowledge and raising the level of competence in Mathematics and in teaching Mathematics. After graduating, the employment opportunities are increased in teaching at different levels: secondary schools, high schools, post high schools and universities. Also, they can perform guidance and control activities at School Territorial Inspectorates.

Computational Mathematics (in Hungarian)

This programme is an excellent opportunity for the graduates of first cycle of higher education to deepen their knowledge and to continue the training in a field of modern theoretical and applied research purposes. The main objective of the program is the formation of high level specialists in this important field. The formation of high school teachers of Mathematics and Computer Science envisaged. The acquirement of a complex knowledge according to the current technological requirements



Databases

The Databases master's program offer theoretical and practical knowledge in information technology and is taught in Romanian language. In recent years there is a growing demand from the students to specialize in areas close to databases, internet communication and applications in different environments. The program was created to respond to that demand, offering theoretical and technical knowledge in information technology and application of theoretical knowledge in databases, information security, web programming, electronic commerce.

Distributed Systems in Internet

The information technology is widely used in the global business environment. Virtual shops present in our homes through Web sites, provide the easiest way for the buyer to make everyday purchases. The Distributive Systems in Internet master's program offer theoretical and practical knowledge in this domain and is taught in Romanian language.

Software Engineering

Software development companies need professionals able to build large software systems, incorporating complex interactions and sophisticated mathematical models. The Software Engineering master's program offers theoretical and practical implementation knowledge in this domain and is taught in English. The curricula is build using the paradigm "scientist-practitioner", being inspired from other European computing science programmes, thus ensuring the compatibility of studies in the European Higher Education Area.



Component-Based Programming

Component-based programming (CBP) is considered the programming paradigm of the new millennium. Software development companies need professionals able to build component-based software systems, incorporating complex interactions and sophisticated mathematical models. The Component-based programming master's program offers theoretical and practical knowledge in this domain and is taught in English.

Modeling and Simulation

The objectives of this program are the training in the modeling and simulation of various types of problems, the acquisition of the mathematical knowledge necessary in order to tackle complex problems. Also, the acquisition of in-depth knowledge in the modeling / design / implementation of complex applications aimed at simulating various aspects and solving problems specific to natural sciences or economics. At last but not least, the program aims that the students will gain specialized knowledge in the analysis and improvement of software processes and professional modeling for team work as well as interdisciplinary approaches to research and development. Finally, ths program is taught in English language.





Intelligent Systems

The programme structure covers the main topics in Intelligent Systems and related areas. The aims of the programme are: i) To offer the main conceptual and computational tools of Artificial Intelligence, ii) Develop skills for coping with real world problems, iii) Develop research abilities. Finally, this program is also taught in English.

Optimization of Computational Models

This master program present new methods of optimization in data analysis, parallel computing, stochastic search, stochastic modeling of data and simulation methods. The query optimization in databases and cryptography will be presented. The research project in optimization of computational models is an introduction in scientific research practice. This master program gives an overview of the advanced concepts of optimization techniques in different areas of computer science and is taught Hungarian language.



Doctoral Programmes

The Ph.D. programme in Mathematics/Computer Science take place under the guidance of 18 doctoral supervisers in the field of Mathematics and 7 doctoral supervisers in the field of Computer Science.

Core courses:

Mathematics:

Commutative rings and algebraic number Theory, Coding theory, Modular representation of finite groups, Nonsmooth analysis, Nonlinear analysis, Fixed point theory and applications, Convex analysis, Variational calculus, Nonlinear partial differential equations, Fluid mechanics

Computer Science:

Models and implementation of distributed applications, Databases, Distributed artificial intelligence, Games computational theory, Languages, tools and programming media, Software architecture.

The holder of a Ph.D. diploma may activate, on the condition of graduating the pedagogical module, as teacher and as academic staff, in the Specialty of Mathematics or Computer Science in any state or private educational institution at any level including universities. As well the holder of a Ph.D. diploma may activate in any institution or company of the economy and administration on positions requiring the necessity of high level studies in Mathematics or Computer Science.

SITUATION students enrolled ACADEMIC YEAR 2012-2013

No	Specialization	Year I	Year II	Year III	No. of graduates
1.	Computer Science – Romanian	198	161	151	119
2.	Computer Science – english	150	111	88	63
3.	Computer Science Hungarian	100	55	38	19
4.	Mathematics – Romanian	32	13	26	24
5.	Mathematics Computer Science – Romanian	98	36	27	29
6.	Mathematics Computer Science – German	-	-	4	2
7.	Mathematics Hungarian	11	15	14	7
8.	Mathematics Computer Science – Hungarian	6	10	10	6



SITUATION students enrolled ACADEMIC YEAR 2012-2013

No		Academic year				No of
	Specialization	Year I	Year II	Year III	Year IV	Graduates
						2013
1.	Information	-	-	20	8	-
	Engineering -					
	Hungarian					
2.	Information	-	32	26	20	11
	Engineering -					
	Romanian					
3.	Information	-	-	17	10	7
	engineering -					
	English					

Master

	Specialization	Year 1	Year 2	No of graduates 2013
1.	Applied Mathematics Romanian	7	8	6
2.	Didactic Mathematics Romanian	24	14	12
3.	Didactic Mathematics Hungarian	7	7	4
4.	Computational Mathematics Hungarian	4	3	1
5.	Component-Based Programming english	24	20	14
6.	Intelligent systems english	12	4	4
7.	Modeling and Simulation english	-	6	5
8.	Software engineering english	43	38	12
9.	Databases - Romanian	40	37	18
10.	Distributed Systems in Internet – Romanian	39	38	27
11.	Optimization of Computational Models Hungarian	17	10	5



International Cooperation

International incoming visits:

Sorana Cîmpan	University of Savomie, France	
Kincses János	University of Szeged, Hungary	Erasmus
Andi Kivinukk	University of Tallin, Estonia	Erasmus
Muzsnay Zoltán	University of Debrecen, Hungary	Erasmus
Ján Stoffa	University of J. Selye, Komarno, Slovakia	Erasmus
Körtesi Péter	University of Miskolc, Hungary	CEEPUS
Veronika Stoffa	University of J. Selye, Komarno, Slovakia	CEEPUS
Blázsik Zoltán	University of Szeged, Hungary	CEEPUS
Stefan Gubo	University of J. Selye, Komarno, Slovakia	CEEPUS
Edwin Brady	University of St Andrews, Scotland	DSL Summer School
Marco Danelutto	University of Pisa, Italy	DSL Summer School
Jeremy Gibbons Kevin Hammond Jan Kuper	University of Oxford, England University of St Andrews, Scotland University of Twente, Netherlands	DSL Summer School DSL Summer School DSL Summer School
Rinus Plasmeijer	University of Radboud Nijmegen, Netherlands	DSL Summer School
Joao Saraiva	University of Minho, Portugal	DSL Summer School
Zoltán Porkoláb	University of Eötvös Loránd Budapest, Hungary	DSL Summer School
Gergely Dévai	University of Eötvös Loránd Budapest, Hungary	DSL Summer School
Máté Tejfel	University of Eötvös Loránd Budapest, Hungary	DSL Summer School
Viktória Zsók	University of Eötvös Loránd Budapest, Hungary	DSL Summer School



International Cooperation

International outgoing visits:

- 1. Groșan Teodor, 9-13.11.2012, conference participation, Viena (Austria)
- 2. Farkas Csaba, 13-20.05.2013, research grant, Paris (France)
- 3. Breaz Simion, 06-15.08.2012, conference, Szeged (Hungary)
- 4. Găceanu Radu, 23.06-10.07.2013, research grant, Wayne State Univ., Detroit (USA)
- 5. Crivei Septimiu, 12-19.08.2012, research visit, Bielefeld (Germany)
- 6. Chiorean Ioana, 28.09-07.10.2012, research visit, Insbruck (Austria)
- 7. Breckner Brigitte, 02-06.10.2013, research visit, Darmstadt (Germany)
- 8. Buică Adriana, 23.09-19.10.2013, research visit, Barcelona (Spain)
- 9. Breckner Brigitte, 03-06.12.2012, research visit, Viena (Austria)
- 10. Crivei Septimiu, 01-08.06.2013, conference participation, Murcia (Spain)
- 11. Breaz Simion, 13-21.07.2013, conference participation, Bedlewo
- 12. Buică Adriana, 06-13.06.2013, research visit, Barcelona (Spain)
- 13. Agratini Octavian, 23-31.10.2012, invited professor, Ankara (Turkey)
- 14. Agratini Octavian, 10-17.05, Erasmus,, Univ. of Miskolc (Hungary)



Partnerships

This section contains the collaboration with It companies, high schools, and others events in which the faculty had contributed.

Collaborations with IT companies

1) Over 50 partnerships with IT companies

(http://www.cs.ubbcluj.ro/despre-facultate/relatia-cu-societatea/firmepartenere/)

Annual Meeting - Faculty of Mathematics and Computer Science 2) and IT compnaies, 28.09.2013 - establishing the common plan and collaboration directions for the 2012-2013 academic year, Main Building, room N. lorga

From November 2012, the Babes-Bolyai University, and the 3) Faculty of Mathematics and Computer Science are members of the ITCluj, a cluster of IT companies, universities and local authority organizations aiming to enhance the innovation and competitiveness of the regional IT sector.

Internship Workshop, 14.03.2013, Foyer University House: 28 4) software companies presented their internship offer for our students.

Companies Evozon and ISDC were envolved and made 5) presentations at the course "Software Systems' Verification and Validation"

Company Yonder was envolved and made presentation at the 6) course "Web design and optimization" and at the course "Grid, Cluster si Cloud Computing"

Companies BGSoft, Endava, Evozon, Skobbler, Transart, and 7) Yonder sponsored the Knowledge Engineering: Principles and Techniques Conference (KEPT) 2013

Companies Siemens and ISDC sponsored Student Scientific 8) **Communication Session – Computer Science**



Partnerships

Collaboration and representation in the society

1) Over 20 partnerships with schools, high-school, libraries, and NGO's 2) co-organizer "ITeam_net", T.Popoviciu Highschool Cluj-Napoca, 28.04.2013

3) partner in organizing the National Finals of the contest "History and Civil Society in virtual dimension", 19-21.04.2013

4) co-organizer, contest "Marian Țarină" (Mathematics and Computer Science), 11-05-2013

5) Contest "Mate-Info UBB", 13.04.2013

6) co-organizer Inter-County Contest of Applied Mathematics, ECOMAT, Col. Ec. Gh. Dragoş, Satu Mare, 27.04.2013



Conferences Organized by the Faculty

- Theodor Angheluta Seminar 14thInternational Conference on Applied Mathematics and Computer Science, co-organized by Department of Mathematics, Faculty of Automation and Computer Science, Technical University of Cluj-Napoca and Department of Mathematics, Faculty of Mathematics and Computer Science, Babeş-Bolyai University of Cluj-Napoca, August 29-31, 2013, Cluj-Napoca, Romania
- ICAPM 2013 5thInternational Conference on Applications of Porous Media, August 25-28, 2013, Cluj-Napoca, Romania
- 3rdSummer School on Data Assimilation and its Applications, July 22

 August 2, 2013, Faculty of Mathematics and Computer Science, Babeş-Bolyai University of Cluj-Napoca
- DSL 2013 5thSummer School on Domain Specific Languages, July 8-20, 2013, Faculty of Mathematics and Computer Science, Babeş-Bolyai University of Cluj-Napoca
- International Conference on Knowledge Engineering Principles and Techniques, KEPT 2013, 4thedition, July 5-7, 2013, Cluj-Napoca, Romania
- National Conference "Didactics of Mathematics", 29thedition, to be held at Şcoala Gimnazială Ibăneşti Pădure, Mureş (May 18, 2013)



Summer Schools

Summer School on Domain Specific Languages



DSL 2013 is a ten-days intensive summer school organised by the Faculty of Mathematics and Informatics targeting the research in domain specific languages. It is the 5th summer school organised within the framework of the Central European Functional Programming School (CEFP), organised between July 8-20, 2013 in Cluj-Napoca. A regular outcome of the summer school

<u>3rd Summer School on Data Assimilation and its</u> <u>Applications</u>

Organized by: Delft University of Technology (TU), Netherlands; Dutch Organization for Applied Scientific Research (TNO), Netherlands; Department of Mathematics, Faculty of Mathematics and Computer Science, Babeş-Bolyai University of Cluj-Napoca, Romania.Period: 22nd July – 2nd August, 2013 Location: Faculty of Mathematics and Computer Science, Babeş-Bolyai Univ



Research Journals of the Faculty

FIXED					
An International	Journal on				
	Theory, Applications				
house of the book of science	Vol. 4, no. 1 / 2003				

- <u>Studia Universitatis Babeş-</u> <u>Bolyai, Series Mathematica</u> (quaterly)
- <u>Studia Universitatis Babeş-</u> <u>Bolyai, Series Informatica</u> (quarterly)
- Fixed Point Theory (twice)
- Didactica Matematicii



STUDIA UNIVERSITATIS



SERIES





Student activities

This section lists the activities organized by the faculty for students and the events and contests where the students of our faculty participated:

1. Contest "Leave your mark of the faculty image", nov.2012- apr. 2013. Results:

1st place: Strajan Sebastian Ioan 2nd place: Pongracz Lajos-Levente 3r place: Mercea Emil

2. UBBots 2013 – Day of Intelligent Robots at UBB (6th edition), 10.03.2013, Campus Building, main hall (organizers:

Assoc.prof.PhD. Mihai Oltean, PhD studentsOvidiu Şerban and Alina

Miron). www.ubbots.com Sponsors: Betfair, Bitdefender, Evozon, Fortech, Gameloft, Garmin, ISDC, Neusoft, Robofun, SDL, SoftVision, TakeOffLabs, Yardi.

3. ACM programming contest, Bucharest, oct.2012: the faculty participated with 2 teams. Places 23rd, 35th from 78 participants; **4.** Imagine CUP, national finals, april 2013, Bucharest. The faculty participated with 2 teams:

- Raul Incze, Ionuț Lala, Dochițoiu Cristina (at Game Design)



- Ionut Căzan, Paul Cîrstean, Alexandru Coman (at World Citizenship)

5. ECN Programming Contest, Tg. Mureş, may 2013. First place for the team of the faculty composed by: Cosmin Tutunaru, Artiom Casapu, Dan Mogoreanu

6. Internship Workshop, 14.03.2013, Foyer University House: 28 software companies presented their internship offer for our students.



Student activities

7.Contest "Traian Lalescu", local phase, 2013, 22.04.2013

Awards:

- · Prize I: Balaci Andrei-George (Mathematics-Computer Science, 1st studying year)
- · Prize II: Nechita Mihai (Mathematics-Computer Science, 2nd studying year)
- Prize III: Radu Patricia Teodora (Mathematics-Computer Science, 1st studying year) and Albisoru Andrei Florin (Mathematics-Computer Science, 1st studying year)
- . Catalysts Coding Contest, 19.10.2012, Campus Building, 3rd floor
- . Catalysts Coding Contest, 26.04.2013, Campus Building, 3rd floor

8. Student Scientific Communication Session – Mathematics, 24.05.2013, Mathematicum Building, room Multimedia

9. Student Scientific Communication Session – Computer Sceince, organized in coopration with Technical University, Faculty of Automation and Computer Science, 21.06.2013, at Technical Univ.

Overall prize offered by ISDC (best paper): Bogdan Bondor (UBB) Comparison of software development process with different server-side technologies.

Faculty prizes (sponsored by Siemens):

1st prize: OptiMeasure: A Mobile Improvement Alternative to Classic Optical Measurements
 Ispas Mihai, Lare Nicusor-Cosmin, Darabant Sergiu Adrian, Borza Diana-Laura
 2nd prize: WYSST (What You Should See Today), Albu Silvana
 3rd prize: Data Visualization using HTML5 Canvas and Javascript, Beldean Alina



Hermes Society

he student union of the Faculty of Mathematics and Computer Science is a great example of what students can do with the energy of youth and a little help from the university staff. The name of this union is "Hermes Society" and is part of the U.S.R. (Uniunea Studentilor din Romania-Romanian Students' Union) and COS(Consortiul Organizatiilor Studentesti din Cluj-Napoca-Consortium of Student Organisations in Cluj-Napoca). The union seeks to create opportunities for personal development and friendship for the students of the faculty.

The year that has passed a lot of activities were organized both from the Hermes Society and the faculty. Hermes Society organized the following activities:

- Annual Ball which was held on November 2012
- Unifest, a week with a lot of student activities, such as sports, workshops, etc. (a project under the USR aegis)
- Team building: held both at autumn and spring.
- Careers in IT. A career fair which was held on 26-28 March and involved all the main IT companies of Clui-Napoca in offering internships, jobs, tours and presentations to the students.
- SSMI (Săptămâna Studentilor de la Matematică si Informatică): Student's week on 22-26 April 2013 with 2 conferences with international speakers, workshops on mathematics and on computer science, movie night and folk music night.

Social Hackaton: 24h programming contest for student teams for creating desktop, mobile and web applications

Promotion Caravan: students from the Hermes Society tour the best high schools in Transylvania to attract students to come and study at the faculty of Mathematics & CS. It was held for first time this year and it went very good.

Because many members also have representative attributions





(year representatives, faculty council members, student chancellor, and student senator) the Society is able to contribute to the well being of all the students of the faculty and insures the swift resolution of all student problems.

The year that has passed a lot of activities were organized both from the Hermes Society and the faculty. Hermes Society organized the following activities:

- Annual Ball which was held on November 2012
- Unifest, a week with a lot of student activities, such as sports, workshops, etc. (a project under the USR aegis)
- Team building: held both at autumn and spring.
- Careers in IT. A career fair which was held on 26-28 March and involved all the main IT companies of Cluj-Napoca in offering internships, jobs, tours and presentations to the students.
- SSMI (Săptămâna Studentilor de la Matematică și Informatică): Student's week on 22-26 April 2013 with 2 conferences with international speakers, workshops on mathematics and on computer science, movie night and folk music night.
- Social Hackaton: 24h programming contest for student teams for creating desktop, mobile and web applications

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Lectures, events and ceremonies organized by the faculty

- 1. Faculty awards: at the official opening of the academic year, 1st oct. 2012, the faculty awarded prizes in recognition of outstanding academic and research actitivities to the following people:
 - Prof. PhD. Gabriela Czibula, Dept. of Computer Science, outstanding research (ISI articles)
 - · Assoc.Prof.PhD. Teodor Groşan, Dept. of Mathematics, outstanding research (ISI articles)
 - Assoc.Prof.PhD. Csato Lehel, Dept. of Hungarian Line, Dept. of Mathematics, outstanding research (PhD student supervision)
 - Assoc.Prof.Simona Motogna, Dept. of Computer Science, outstanding education, mentor – 2nd place Worlwide imagine Cup Finals
 - Prof.PhD. Radu Precup. Dept. of Mathematics, outstanding education, international published book
 - · Lect. PhD. ANDRÁS Szilárd, dept. of Hungarian Line, outstanding education, lifelong educational program
- 2. Conference "The cut polytope and the image of the correlation map", Speaker PhD. Orest Bucicovschi (University of California, San Diego), 06.02.2013, Mathematicum Building, room e
- Conference "From Verification to Specification Inference", Speaker Prof. PhD. Wei-Ngan Chin (Department of Computer Science, National University of Singapore), 25.02.2013, Campus Building, room C310
- Conference "On Subset Sums", Speaker Prof. Endre Szemerédi (Abel Prize Winner 2012), Professor of Computer Science at Rutgers University and Alfréd Rényi Institute of Mathematics Budapest, 05.03.2013, room Tiberiu Popovici



Lectures, events and ceremonies organized by the faculty

- 5. Conference "Jamming and Clogging Transitions for Systems with Quenched Disorder", Speaker Dr. Charles Reichhardt Theoretical Division, Los Alamos National Laboratory, Los Alamos, USA, 07.03.2013, room Augustin Maior
- Conference "Approximation by Shannon Sampling Operators", Speaker Prof.PhD. Andi Kivinukk, Tallinn University, Estonia, 19.03.2013, Mathematicum Building, room e
- 7. Astronomy Exhibition "Discover the Universe"

The Astronomical Observatory (part of Faculty of Mathematics and Computer Science) organized in cooperation with The Astronomical Society Andromeda the Astronomy Exhibition "Discover the Universe", between 17-21.04.2013, at the Ethological Museum of Transyvania. http://www.astrocluj.ro/Evenimente/expouniv2013.html.

- 8. IBM Solutions for efficient academic education High Performance Computing, 26.04.2013, room T.Popoviciu
- 9. XXIX National Conference of Didactic Mathematics, Ibăneşti Pădure, 18.05.2013
- 10. Organized by Faculty of Mathematics and Computer Science in cooperation with Society of Mthematical Sciences of counties Cluj and Mureş, School Inspectorate of county Mureş and Gymnasium School.
- 11. Ceremony of awarding the title Profesor Honoris Causa of Faculty of Mathematics and Computer Science to Professor

Lectures, events and ceremonies organized by the faculty

Preda Mihăilescu, Ph.D., Georg August University, Göttingen, Germany, 30.05.2013, room T.Popoviciu.

- Ceremony of awarding the title Doctor Honoris Causa of Babeş-Bolyai University to mathematician Professor Boris S. Mordukhovich, Ph.D., Wayne State University, USA, 12.06.2013, Aula Magna UBB.
- 13. Conference "A look at the third stage of Fourier Analysis", Prof.PhD. Constantin Corduneanu, University of Texas at Arlington, SUA, 25.06.2013, room Tiberiu Popoviciu
- Conference "Equilibria and Weighted Complementarity Problems", Speaker Prof. Florian Potra, University of Maryland, Baltimore County, SUA, 18 iulie 2013, ora 12:00 Mathematicum Building, room e



Department of Mathematics



Profile

The department is responsible for the specialization Mathematics. The purpose of the programme is to offer the following competences:

- · to teach fundamental knowledge in mathematics
- to elaborate algorithms and use modern computer systems.
- to generate and implement new scientific and didactic approaches and methods.
- to use basic and complementary knowledge in pursuing a master program in the field of Mathematics or related fields.

Generally, by graduating from this program, there is a wide range of potential field of professional activity. The holder of a bachelor diploma in Mathematics may activate, under the condition of graduating the pedagogical module, as teacher in the Specialty of Mathematics in any state or private educational institution of gymnasium level. What is more, the holder can also pursue a job in administration, industry, finance or computer science.

The research conducted in the department is organized in nine research groups, with outstanding members and results. There are 3 scientific journals published under the supervision of the department, and each year we are organizing important international conferences.



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- 20. OPREA Anca, *Doctoral Student* Domains of interest:



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Research groups in the field of Mathematics

- 1.<u>Algebra</u> http://math.ubbcluj.ro/~aga_team/
- 2.<u>Analysis and Optimization</u> http://www.cs.ubbcluj.ro/~grupanopt/
- 3.<u>Geometry</u> http://www.cs.ubbcluj.ro/wpcontent/uploads/seminar-geometrie-2012.pdf
- 4.<u>Geometric Analysis</u> http://www.cs.ubbcluj.ro/wpcontent/uploads/Prog_Sem_-Cercetare-de-Analiza-Geometrica_2012-13.pdf
- 5.<u>Theory of functions</u> http://math.ubbcluj.ro/~gctf/
- 6.<u>Nonlinear operators and differential equations</u> http://www.math.ubbcluj.ro/~nodeacj/soned.html
- 7.<u>Numerical analysis and stochastic</u> http://www.cs.ubbcluj.ro/wp-content/uploads/ans-2012.pdf
- 8.<u>Mechanics and Astronomy</u> http://math.ubbcluj.ro/~mecgrup/
- 9.Modeling and Simulation http://www.cs.ubbcluj.ro/~smcv/





Department Mathematics

- FECHETE Dorina Lucia Contribuții la studiul unor construcții algebrice. Aspecte categoriale şi aplicații la aritmetica numerelor fuzzy, advisor: Prof. univ. dr. PURDEA Ioan
- 2. REVNIC Vasile Cercetări de teorie Morse discretă și aplicații, advisor: Prof. univ. dr. ANDRICA Dorin
- FRĂTEAN Alina Ramona (căs. BAIAS) Dual Representations and Subdifferential Formulae for Convex Risk Functions. Contributions to extension Theorems for Set-Valued Maps, advisor: Prof. univ. dr. DUCA Dorel
- 4. MANGRA Dana- Maria Cercetări de teorie Morse circulară și aplicații, advisor: Prof. univ. dr. ANDRICA Dorin
- 5. BARBU lonel Cătălin Contribuții la studiul geometriei hiperbolice, advisor: Prof. univ. dr. ANDRICA Dorin
- 6. FERICEAN Denisa Gabriela Techniques of potential theory and geometric function theory in the study of some problems in fluid mechanics, adviser: Prof. univ. dr. KOHR Mirela
- ROHAN L. Ramona Andreea Cercetări asupra aplicației exponențiale şi mecanica geometrică, adviser: Prof. univ. dr. ANDRICA Dorin
- 8. TARABIE Saddika Contributions to Korovkin type approximation, adviser: Prof. univ. dr. AGRATINI Octavian
- 9. POP Emilia Loredana Duality and optimality conditions in vector optimization, adviser: Prof. univ. dr. DUCA Dorel
- BONCEA Horațiu Vasile Duality and Approximation for Special Classes of Optimization Problems, adviser: Prof. univ. dr. DUCA Dorel
- 11. AȘTEFĂNOAEI Alina Mihaela (BABOȘ) Reprezentări şi evaluări ale restului în formule de interpolare şi de integrare numerică cu aplicații, adviser: Prof. univ. dr. BLAGA Petru
- BUDIŞAN Sorin Monel Compression expansion theorems of Krasnoselskii type and applications, adviser: Prof. univ. dr.



PhD Thesis

PRECUP Radu

- 13. PÅTRULESCU Flavius Olimpiu Ordinary Differential Equations and Contact Problems: Modeling, Analysis and Numerical Methods, advisers: Prof. univ. dr. AGRATINI Octavian, Prof. univ. dr. SOFONEA Mircea (Via Domitia University of Perpigan)
- 14. PETRE Ioan Radu Incluziuni operatoriale prin tehnica punctului fix în spații metrice vectoriale, adviser: Prof. univ. dr. **PETRUSEL** Adrian
- 15. TUNS Oana Ruxandra (cas. BODE) Particular optimization problems with application in economy, adviser: Prof. univ. dr. LUPSA Liana
- 16. CIOBAN Liana Contributions to the theory of variational inequalities, equilibrium and optimization problems via duality, adviser: Prof. univ. dr. DUCA Dorel
- 17. BUTACI Casian Solvency II: Solvabilitatea societăților de asigurare, advisers: Prof. univ. dr. PETRUSEL Adrian Adrian, Prof. univ. dr. TULAI Constantin
- 18. COCONET Tiberiu Group actions and modular representation theory, adviser: Prof. univ. dr. MĂRCUŞ Andrei



Books - international publishing houses

- 1. Andrica Dorin, Bulgarean Gheorghe-Vasile, chapter, Some Remarks on the Group of Isometries of a Metric Space, Nonlinear Analysis, Springer, Heidelberg, New York, Dordrecht, London, Editor: P.M.Pardalos, P.G.Georgiev, H.M.Srivastava, 2012, P. 57-64
- 2. Andrica Dorin, Pintea Cornel Sebastian, chapter, *Recent Results* on the size of Critical Sets, Essays in Mathematics and its Applications, Springer, Heidelberg, New York, Dordrecht, London, Editor: P.M.Pardalos, Th.H.Rassias, 2012, P. 17-35
- 3. **Precup Radu,** book, *Linear and Semilinear Partial Differential Equations*, De Gruyter, Berlin, http://www.degruyter.com/view/product/179610, 2012, P. 296

Articles – ISI journals

- 1. Agratini Octavian, On a double complex sequence of linear operators, Science_Citation_Expanded, NUMERICAL FUNCTIONAL ANALYSIS AND OPTIMIZATION, 34, issue 6, 2013, P.605 - 612
- Agratini Octavian, Bivariate positive operators in polynomial weighted spaces, Science_Citation_Expanded, ABSTRACT AND APPLIED ANALYSIS, Vol 2013, ID 850760, 2013, P.1 - 8
- 3. Varga Csaba-Gyorgy, Breckner Brigitte-Erika, Multiple solutions of Dirichlet problems on the Sierpinski gasket, Science_Citation_Expanded, JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS, DOI: 10.1007/s10957-013-0368-7, 2013, P.1 - 15
- 4. Crivei Septimiu, Olteanu Gabriela-Eugenia, Inankil Hatice, Kosan Muhammet Tamer, Correspondences of coclosed submodules, Science_Citation_Expanded, COMMUNICATIONS IN



Publications

ALGEBRA, 41, 2013, P.1 - 10

- 5. Crivei Septimiu, Bazzoni Silvana, One-sided exact categories, Science_Citation_Expanded, JOURNAL OF PURE AND APPLIED ALGEBRA, 217, 2013, P.377 - 391
- 6. Hamada Hidetaka, Kohr Gabriela, Univalence criterion and quasiconformal extension of holomorphic mappings, Science_Citation_Expanded, MANUSCRIPTA MATHEMATICA, 141, 2013, P.195 209
- 7. Hamada Hidetaka, Graham Ian, Kohr Gabriela, Kohr Mirela, Asymptotically Spirallike Mappings in Reflexive Complex Banach Spaces, Science_Citation_Expanded, COMPLEX ANALYSIS AND OPERATOR THEORY, DOI 10.1007/s11785-012-0273-3; to appear, 2013, P.1 - 20
- Hernandez Rodrigo, Hamada Hidetaka, Chuaqui Martin, Kohr Gabriela, Pluriharmonic mappings and linearly connected domains in Cn, Science_Citation_Expanded, ISRAEL JOURNAL OF MATHEMATICS, to appear, 2013, P.1 - 18
- 9. Kohr Mirela, Pintea Cornel Sebastian, Wendland Wolfgang L., Dirichlet-transmission problems for pseudodifferential Brinkman operators, Science_Citation_Expanded, ZAMM-ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND MECHANIK, 93, No. 6-7, DOI 10.1002/zamm.201100194, 2013, P.446 - 458
- 10. Hamada Hidetaka, Bracci Filippo, Arosio Leandro, Kohr Gabriela, An abstract approach to Loewner chains, Science_Citation_Expanded, JOURNAL D ANALYSE MATHEMATIQUE, 119, 2013, P.89 - 114
- 11. Kohr Mirela, Lanza de Cristoforis Massimo, Wendland Wolfgang L., Nonlinear Neumann -transmission problems for Stokes and Brinkman equations on Euclidean Lipschitz domains,



Science_Citation_Expanded, POTENTIAL ANALYSIS, 38, DOI: 10.1007/s11118-012-9310-0, 2013, P.1123 - 1171

- 12. Honda Tatsuhiro , Hamada Hidetaka, Kohr Gabriela, Growth and distortion theorems for linearly invariant families on homogeneous unit balls in Cn , Science_Citation_Expanded, JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, 407, 2013, P.398 - 412
- 13. Varga Csaba-Gyorgy, Lisei Hannelore-Inge, A multiplicity result for a class of elliptic problems on a compact Riemannian manifold, Science_Citation_Expanded, JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS, DOI: 10.1007/s10957-013-0365-x, 2013, P.1 - 18
- Pelea Cosmin-Razvan, Hyperrings and \$alpha^*\$-relations. A general approach, Science_Citation_Expanded, JOURNAL OF ALGEBRA, 383, 2013, P.104 - 128
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International Conferences

1. **Pintea Cornel Sebastian,** *Critical points and tangency points,* Universitatea Politehnica, Timisoara, The 13th International Conference on Mathematics and its Applications - ICMA 2012, 2012

Prizes

1. Breaz Simion-Sorin, *Premiu national*, Gheorghe Lazar, Academia Romana, 2012





Visiting professors

- 1. **Precup Radu**, University of Sfax, Tunisia, conference an PhD coordination, Tunisia, Sfax, 2013
- 2. **Precup Radu**, Karlsruhe Institut fur Technologie, summer school ACAMIMM-2012, Germania, Freudenstadt, 2012
- 3. Kohr Gabriela, University of Stuttgart, Department of Mathematics, Research visit, Germania, Stuttgart, 2013
- 4. **Kohr Mirela**, University of Stuttgart, Department of Mathematics, Research visit, Germania, Stuttgart, 2013
- 5. **Kohr Gabriela**, Department of Mathematics, University of Toronto, Canada, Toronto, 2013
- 6. **Kohr Mirela**, Department of Mathematics, University of Toronto, Canada, Toronto, 2013

Invited lecture - conferences

- 1. **Kohr Gabriela**, *Pedagogical University and Pawel Wlodkowic University College in Plock (Poland)*, 9th International ISAAC Congress, 2013, Extremal properties associated with the generalized Loewner differential equation in Cn.
- 2. Kohr Gabriela, American Mathematical Society in partnership with the Simion Stoilow Institute of Mathematics of the Romanian Academy, Joint International Meeting of the AMS and the Romanian Mathematical Society, 2013,
- 3. Kohr Gabriela, *University of Sevilla*, Tenth Advanced Course in Operator Theory and Complex Analysis, 2013, Extremal properties associated with the generalized Loewner differential equation in Cn.

Publications

- 4. Kohr Mirela, Pedagogical University and Pawel Wlodkowic University College in Plock (Poland), 9th International ISAAC Congress, 2013, Poisson problems for semilinear Brinkman systems in Lipschitz domains.
- -5. Kohr Mirela, Babes-Bolyai University, 5th International Conference on Application of Porous Media, 2013, Plenary Speaker: Poisson problems for semilinear Brinkman systems in Lipschitz domains. Applications.
- 6. Kohr Mirela, *University of Sevilla*, Tenth Advanced Course in Operator Theory and Complex Analysis, 2013, Poisson problems for semilinear elliptic systems in Lipschitz domains.
- 7. **Precup Radu**, *Universitatea de Vest*, Zilele Academice Timisene, Workshop: Geometry and PDE, 2013
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- 9. **Precup Radu**, *Abant Izzet Baysal University, Bolu, Turkey*, Titlu: International Conference on Anatolian Communications in Nonlinear Analysis, 2013
- 10. Kohr Gabriela, *University of Padova, Department of Mathematics*, Mini-courses in Mathematical Analysis 2012, Geometric and analytic approaches of Loewner differential equations in Cn.
- 11. Kohr Gabriela, University of Padova, Derpartment of Mathematics, research seminar, 2012
- 12. Kohr Gabriela, Institutul de Matematica al Academiei Romane \"simion Stoilow\"; Facultatea de Matematica si Informatica, Universitatea Bucuresti; Universitatea Ploiesti; Universities of Turku and Helsinki, International Conference on Complex Analysis and Related Topics. The 13th Romanian-Finnish Seminar, 2012,



Geometric and analytic approaches of Loewner chains and Loewner differential equations in Cn.

- 13. **Kohr Gabriela**, *ESFoundation Network HCAA and Spanish Network C-FUNSPOT*, Harmonic and Complex Analysis and its Applications, 2012, Geometric and analytic aspects of Loewner chains in Cn and complex Banach spaces.
- 14. **Kohr Mirela**, *University of Toronto*, seminar talk, 2012, Nonlinear Neumann transmission problems for Stokes and Brinkman systems on Lipschitz domains.
- 15. **Kohr Mirela**, *University of Padova, Department of Mathematics* Mini-courses in Mathematical Analysis 2012, Potential analysis for elliptic boundary value problems on Lipschitz domains.
- 16. **Kohr Mirela**, *Ss. Cyril and Methodius University in Skopje, Ohrid, Republic of Macedonia*, International Symposium on Geometric Function Theory and Applications (GFTA 2012), Layer potential analysis for elliptic boundary value problems on Lipschitz domains.
- 17. Kohr Mirela, Simion Stoilow Institute of Mathematics of the Romanian Academy, Faculty of Mathematics and Computer Science of the University of Bucharest, University of Ploieşti, International Conference on Complex Analysis and Related Topics. The 13th Romanian-Finnish Seminar, 2012, Potential analysis for elliptic boundary value problems on Lipschitz domains.
- Kohr Mirela, ESFoundation Network HCAA and Spanish Network C-FUNSPOT, Harmonic and Complex Analysis and its Applications, 2012, Potential analysis for elliptic boundary value problems on Lipschitz domains in Riemannian manifolds.
- 19. **Kohr Mirela**, internationale, Spania, *Instituto de Ciencias Matematicas*, 9th International Conference on Harmonic Analysis and Partial Differential Equations, 2012, Potential analysis for elliptic



Publications

boundary value problems on Lipschitz domains.

- 20. Kohr Mirela, University of Toronto, Department of Mathematics, seminar talk, 2012
- 21. **Precup Radu**, *Galatasaray University Istanbul*, International Workshop on Fixed Point Theory and Applications, 2012,
- 22. **Salagean Grigore-Stefan**, *Ss. Cyril and Methodius University in Skopje*, 8-th International Symposium on Geometric Function Theory and Applications GFTA 2012



Projects

National Projects – coordinator/ director

- 1. **Breaz Simion-Sorin**, *Functori definiti pe categorii de module*, UEFISCDI, ALGEBRA, LOGICA SI TEORIA NUMERELOR, 2012 -2013,
- 2. **Grosan Teodor Silviu**, 5th International Conferences on Applications of Porous Media, 25-28 August, Cluj-Napoca, Romania, MCT, MECANICA SI ASTRONOMIE, 2013
- 3. Grosan Teodor Silviu, Fenomene de Transport in Nanofluide si Medii Poroase Saturate cu Nanofluide, UEFISCDI, MECANICA SI ASTRONOMIE, 2012 - 2013
- Kohr Gabriela, Aspecte geometrice si analitice ale aplicatiilor biolomorfe in Cⁿ si spatii Banach complexe, UEFISCDI, FUNCTII DE VARIABILE COMPLEXE SI TEORIA POTENTIALULUI, 2012 -2013
- 5. Kohr Mirela, Probleme cu valori pe frontiera pentru sistem eliptice pe domenii nenetede cu aplicatii in mecanica fluidelor, UEFISCDI, MECANICA SI ASTRONOMIE, 2012 - 2013
- 6. **Petrusel Adrian-Olimpiu**, *The 10th International Conference on Fixed Point Theory and its Applications*, MCT, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE, 2012
- 7. **Petrusel Adrian-Olimpiu**, *Fixed Point Theory in Metric Structures*, UEFISCDI, ANALIZA FUNCTIONALA, TEORIA OPERATORILOR, ANALIZA CONVEXA, 2012
- 8. Popovici Nicolae, CERCETARI AVANSATE PRIVIND PROBLEME

Projects

DE OPTIMIZARE VECTORIALA, MULTIVOCA SI INEGALITATI VARIATIONALE IN IPOTEZE DE CONVEXITATE GENERALIZATA, CNCSIS II, ANALIZA FUNCTIONALA, TEORIA OPERATORILOR, ANALIZA CONVEXA, 2012

- 9. **Precup Radu**, *Metode operatoriale pentru sisteme neliniare si aplicatii*, UEFISCDI, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE, 2012 - 2013
- 10. **Precup Radu**, *Sisteme Neliniare in Analiza Matematica si Aplicatii*, CNCSIS II, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE, 2012 - 2013

International and national projects – members

- 1. Blaga Cristina-Olivia *PRIMAS Promoting inquiry in Mathematics and science education across Europe*, European Commision II, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2010-2013
- 2. Bota Monica-Felicia Metode operatoriale pentru sisteme neliniare si aplicatii, UEFISCDI, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2011-2014
- 3. Buica Florina Adriana Metode operatoriale pentru sisteme neliniare si aplicatii, UEFISCDI, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2011-2014
- 4. Chiorean Ioana-Rodica Produse dermatologice pe baza de biomateriale hibride obtinute din antociani si nanoparticule metalice (NATNANOMED), UEFISCDI, CHIMIE ORGANICA SI COMPUSI





NATURALI,2012-2014

- 5. Chiorean Ioana-Rodica Regiunea Piatra Craiului-Dambovicioara: o abordare multidisciplinara a unei megasecvente carbonatice regresive, UEFISCDI, PALEONTOLOGIE-STRATIGRAFIE,2011-2014
- 6. **Crivei Septimiu** *Functori definiti pe categorii de module*, UEFISCDI, ALGEBRA, LOGICA SI TEORIA NUMERELOR,2011-2014
- 7. **Grosan Teodor Silviu** *Probleme cu valori pe frontiera pentru sisteme eliptice pe domenii nenetede cu aplicatii in mecanica fluidelor*, UEFISCDI, MECANICA SI ASTRONOMIE,2011-2014
- 8. **Ilea Veronica-Ana** *Metode operatoriale pentru sisteme neliniare si aplicatii*, UEFISCDI, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2011-2014
- Kohr Mirela Aspecte geometrice si analitice ale aplicatiilor biolomorfe in Cⁿ si spatii Banach complexe, UEFISCDI, FUNCTII DE VARIABILE COMPLEXE SI TEORIA POTENTIALULUI,2011-2014
- 10. Kohr Mirela 5th International Conferences on Applications of Porous Media, 25-28 August, Cluj-Napoca, Romania, MCT, MECANICA SI ASTRONOMIE,2013-2012
- 11. **Modoi George-Ciprian** *Functori definiti pe categorii de module*, UEFISCDI, ALGEBRA, LOGICA SI TEORIA NUMERELOR,2011-2014



Projects

- 12. **Pelea Cosmin-Razvan** *Functori definiti pe categorii de module*, UEFISCDI, ALGEBRA, LOGICA SI TEORIA NUMERELOR,2011-2014
- 13. **Petrusel Adrian-Olimpiu** *Metode operatoriale pentru sisteme neliniare si aplicatii*, UEFISCDI, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2011-2014
- 14. **Pintea Cornel Sebastian** *Structura si senzitivitatea solutiilor inegalitatilor variationale, problemelor de optimizare si echilibru in ipoteze de monotonie generalizata*, UEFISCDI, ANALIZA FUNCTIONALA, TEORIA OPERATORILOR, ANALIZA CONVEXA,2011-2014
- 15. **Pintea Cornel Sebastian** *Probleme cu valori pe frontiera pentru sisteme eliptice pe domenii nenetede cu aplicatii in mecanica fluidelor*, UEFISCDI, MECANICA SI ASTRONOMIE,2011-2014
- Popovici Nicolae Structura si senzitivitatea solutiilor inegalitatilor variationale, problemelor de optimizare si echilibru in ipoteze de monotonie generalizata, UEFISCDI, ANALIZA FUNCTIONALA, TEORIA OPERATORILOR, ANALIZA CONVEXA,2011-2014
- 17. **Rosca Natalia-Carmen** 5th International Conferences on Applications of Porous Media, 25-28 August, Cluj-Napoca, Romania, MCT, MECANICA SI ASTRONOMIE,2013-2012
- 18. Serban Marcel-Adrian Metode operatoriale pentru sisteme neliniare si aplicatii, UEFISCDI, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2011-2014



Representations in professional organizations

- 1. **Vacaretu Daniel**, Societatea de Stiinte Matematice din Romania, from 1983 member
- 2. **Precup Radu**, American Mathematical Society, from 1993 member
- 3. **Precup Radu**, Research Group in Mathematical Inequalities and Applications (RGMIA), from 2004 member
- 4. **Precup Radu**, Societatea de Stiinte Matematice din Romania, from 1982 member
- 5. **Petrusel Adrian-Olimpiu**, International Society of Mathematical Sciences, Osaka, Japan, from 2008 member
- 6. **Petrusel Adrian-Olimpiu**, American Mathematical Society, from 1994 member
- 7. **Petrusel Adrian-Olimpiu**, Societatea Europeana de Matematica, from 2003 member
- 8. **Petrusel Adrian-Olimpiu**, Societatea de Stiinte Matematice din Romania, from 1994 member
- 9. Pelea Cosmin-Razvan, AMS, from 2008 member
- 10. Pelea Cosmin-Razvan, SSMR, from 2000 member
- 11. Kohr Mirela, American Mathematical Society, from 2006 member
- 12. Kohr Mirela, GAMM, from 1995 member
- 13. **Kohr Mirela**, European Science Foundation (ESF), from 2010 member Romania, from 2005 member
- 15. Kohr Gabriela, American Mathematical Society, from 2006 member
- 16. Kohr Gabriela, GAMM, from 1995 member
- 17. **Kohr Gabriela**, European Science Foundation (ESF), from 2010 member
- 18. **Kohr Gabriela**, Societatea de Stiinte Matematice din Romana from 2005 member
- 19. **Crivei Septimiu**, American Mathematical Society, from 2004 member
- 20. **Crivei Septimiu**, Societatea de Stiinte Matematice din Romania, from 1995 member
- 21. Breaz Simion-Sorin, American Mathematical Society, from 2005 member
- 22. Breaz Simion-Sorin, Societatea de Stiinte Matematice din



Representations in professional organizations

Romania, from 2000 - member

- 23. **Blaga Cristina-Olivia**, International Astronomy Olympiad, from 2006 national representant
- 24. **Blaga Aurel-Paul**, European Astronomical Association, from 1992 member
- 25. Blaga Aurel-Paul, TeX Users Group (TUG), from 2006 member
- 26. Andrica Dorin, American Mathematical Society, from 1995 member
- 27. **Andrica Dorin**, Societatea Balcanica a Geometrilor, from 1993 founder
- 28. **Andrica Dorin**, Academia Romano-Americana (ARA), from 2002 corresponing member
- 29. Andrica Dorin, Societatea de Stiinte Matematice din Romania, from 1977 member
- 30. Agratini Octavian, American Mathematical Society, from 1997 member
- 31. **Agratini Octavian**, Societatea de Stiinte Matematice din Romania, from 2008 member
- 32. Popovici Nicolae, SSMR, from 2012, member
- 33. **Popovici Nicolae**, American Mathematical Society, from 2012, member
- 34. **Popovici Nicolae**, EUROPT (The Continuous Optimization Working Group of EURO - Association of European Operational Research Societies), from 2012, member
- 35. **Popovici Nicolae**, WGGC (Working Group on Generalized Convexity), from 2012, member
- 36. **Popovici Nicolae**, MCDM (International Society on Multiple Criteria Decision Making), from 2012, member



Representations in professional organizations

Public representations

- 1. **Agratini Octavian**, Consiliul National de Atestare a Titlurilor, Diplomelor si Certificatelor Universitare (CNATDCU), 2012, member, Commission Mathematics
- 2. **Agratini Octavian**, Consiliul National de Atestare a Titlurilor, Diplomelor si Certificatelor Universitare (CNATDCU), 2013, member, Commission Mathematics
- 3. **Agratini Octavian**, Agentia Nationala de Asigurare a Calitatii in Invatamantul Superior (ARACIS), from 2012, evaluating expert
- 4. Kohr Gabriela, CNCSIS, 2012, evaluating expert
- 5. Kohr Mirela, CNCSIS, from 2011, evaluating expert

International Editorial Boards:

- 1. **Agratini Octavian**, Facta Universitatis, Nis, Serbia, from 2006, member
- 2. Agratini Octavian, Mathematical Reviews, from 1997, reviewer
- 3. **Agratini Octavian**, Open Journal of Discrete Mathematics, from 2011, member
- 4. **Agratini Octavian**, Studia Universitatis Babes-Bolyai, Mathematica, from 2011, editor in chief
- 5. **Agratini Octavian**, Mathematica, Cluj, from 2006, member **Andrica Dorin**, Balkan Journal of Geometry, from 2001, member
- 7. Andrica Dorin, Studia Univ.Babes-Bolyai-Mathematica, from 1997, member
- 8. Andrica Dorin, General Mathematics, from 2001, member
- 9. Andrica Dorin, Acta Universitatis Apulensis, from 2004, member
- 10. **Andrica Dorin**, Creative Mathematics and Informatics, from 2005, member
- 11. Andrica Dorin, Bulletin of Calcutta Mathematical Society, 2003, member
- 12. Andrica Dorin, Mathematica, 2006, member
- 13. Blaga Aurel-Paul, The PracTeX Journal, from 2006, Production



Representations in professional organizations

Editor

- 14. **Buica Florina Adriana**, FIXED POINT THEORY, from 2006, Associate Managing Editor
- 15. **Catinas Teodora-Maria**, Journal of Advanced Research in Applied Mathematics, from 2008, member
- 16. **Chiorean Ioana-Rodica**, Journal of Advanced Researches on Applied Mathematics, from 2008, editor
- 17. **Kohr Gabriela**, JIPAM-Journal of Inequalities in Pure and Applied Mathematics , from 2005, member
- 18. Lisei Hannelore-Inge, JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS, from 2012, guest editor
- 19. Muresan Marian, Scientific Journals International, from 2007, editor
- 20. **Petrusel Adrian-Olimpiu**, Scientiae Math. Japinicae, from 2008, Editorial Board
- 21. **Petrusel Adrian-Olimpiu**, Journal of Nonlinear Functional Analysis and Differential Equations, from 2007, Editorial Board
- 22. **Petrusel Adrian-Olimpiu**, FIXED POINT THEORY, from 2003, Managing Editor
- 23. **Precup Radu**, Mathematics in Engineering, Science and Aerospace MESA , from 2010, member of the Editorial Board
- 24. **Precup Radu**, Studia Univ. Babes-Bolyai Math., from 2003, editor in chief
- 25. **Precup Radu**, Ann. Tiberiu Popoviciu Semin. Funct. Eq. Approx. Convexity, from 2010, editor
- 26. **Precup Radu**, CARPATHIAN JOURNAL OF MATHEMATICS, from 2005, member
- 27. **Precup Radu**, JOURNAL OF INEQUALITIES AND APPLICATIONS, from 2009, member
- 28. **Precup Radu**, FIXED POINT THEORY, from 2003, Deputy editorin-chief
- 29. **Salagean Grigore-Stefan**, Journal of Approximation Theory and Applications , from 2005, member



Representations in professional organizations

- 30. **Salagean Grigore-Stefan**, Studia Universitatis Babes-Bolyai. Mathematica, from 2001, member
- 31. **Salagean Grigore-Stefan**, Acta Universitatis Apulensis. Mathematics-Informatics, from 2001, member
- 32. **Salagean Grigore-Stefan**, Journal of Applied Computer Science & Mathematics, from 2007, member
- 33. **Agratini Octavian**, STUDIA UNIVERSITATIS BABES-BOLYAI. MATHEMATICA, from 2003, member
- 34. Andrica Dorin, Gazeta Matematica, from 1996, member
- 35. Breaz Simion-Sorin, MATHEMATICA, from 2002, redaction secretary
- 36. **Breaz Simion-Sorin**, STUDIA UNIVERSITATIS BABES-BOLYAI. MATHEMATICA, from 2010, Editor
- 37. Breckner Brigitte-Erika, MATHEMATICA, from 2007, redaction secretary
- 38. **Catinas Teodora-Maria**, STUDIA UNIVERSITATIS BABES-BOLYAI. MATHEMATICA, from 2005, secretary
- 39. Chiorean Ioana-Rodica, STUDIA UNIVERSITATIS BABES-BOLYAI. MATHEMATICA, from 2004, reviewer
- 40. Crivei Septimiu, MATHEMATICA, from 2001, scientifi secretary
- 41. Duca Dorel, Didactica Mathematica, from 1999, Editor-in-Chief
- 42. Duca Dorel, Universul matematic, from 2000, member
- 43. **Duca Dorel**, Creatii matematice, seria A, from 2006, honorary member
- 44. **Duca Dorel**, Creatii matematice, seria B, from 2006, honorary member
- 45. **Duca Dorel**, Revista de matematica Transilvania, from 1998, member
- 46. Duca Dorel, Educatia Matematica, from 2004, member
- 47. **Duca Dorel**, REVUE D'ANALYSE NUMERIQUE ET DE THEORIE DE L'APROXIMATION REVUE D'ANALYSE NUMERIQUE ET DE THEORIE DE L'APROXIMATION, from 1983, redaction secretary



Representations in professional organizations

- 48. Duca Dorel, CREATIVE MATHEMATICS, from 2006, member
- 49. Grad Anca, Didactica Mathematica, from 2010, Managin Editor
- 50. Kohr Gabriela, MATHEMATICA, from 2007, member
- 51. Kohr Mirela, STUDIA UNIVERSITATIS BABES-BOLYAI. MATHEMATICA, from 2010, member
- 52. **Lisei Hannelore-Inge**, STUDIA UNIVERSITATIS BABES-BOLYAI. MATHEMATICA, from 2011, scientific secretary
- 53 Lupsa Liana, ANNALS OF THE TIBERIU POPOVICIU SEMINAR OF FUNCTIONAL EQUATIONS, APPROXIMATION AND CONVEXITY, from 2003, editor
- 54. **Petrusel Adrian-Olimpiu**, STUDIA UNIVERSITATIS BABES-BOLYAI. MATHEMATICA, from 2004, member
- 55. Petrusel Adrian-Olimpiu, MATHEMATICA, from 2005, member
- 56. Pintea Cornel Sebastian, STUDIA UNIVERSITATIS BABES-BOLYAI. MATHEMATICA, from 1995, member
- 57. Popovici Nicolae, MATHEMATICA, from 2006, editor
- 58. **Precup Radu**, TRANSYLVANIAN JOURNAL OF MATHEMATICS AND MECHANICS, from 2009, Anul de sfarsit: in prezent, member

Reviewer for international and national journals:

- 1. Breaz Simion-Sorin: Mathematica, International Electronic Journal of Algebra, CMUC, Algebra, British Journal of Mathematics & Computer Science, CENTRAL EUROPEAN JOURNAL OF MATHEMATICS, REVISTA MATEMATICA COMPLUTENSE, GLASNIK MATEMATICKI, BULLETIN OF THE LONDON MATHEMATICAL SOCIETY CARPATHIAN JOURNAL OF MATHEMATICS
- 2. **Crivei Septimiu**: JOURNAL OF ALGEBRA AND ITS APPLICATIONS, COMMUNICATIONS IN ALGEBRA.
Babeş-Bolyai University



Representations in professional organizations

- 3. Kohr Mirela: Applications and Applied Mathematics: An International Journal (AAM), MATEMATIČKI VESNIK, CHEMICAL ENGINEERING COMMUNICATIONS, JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, ZAMM-ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND MECHANIK, POTENTIAL ANALYSIS, MATHEMATICAL METHODS IN THE APPLIED SCIENCES, COMPLEX VARIABLES AND ELLIPTIC EQUATIONS, STUDIA UNIVERSITATIS BABES-BOLYAI: MATHEMATICA.
- 4. Lisei Hannelore-Inge: JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS, NONLINEAR ANALYSIS-THEORY METHODS & APPLICATIONS.
- 5. **Popovici Nicolae**: ACTA MATHEMATICA SCIENTIA, APPLIED MATHEMATICS LETTERS, OPTIMIZATION, JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS, OPTIMIZATION, APPLIED MATHEMATICS AND COMPUTATION, STUDIA

Members of the Organizing and Scientific Committees of International Conferences:

- 1. **Grosan Teodor Silviu**, 5th International Conference of Applications of Porous Media, Romania, 2013,
- 2. **Kohr Mirela**, 5th International Conference on Applications of Porous Media, Romania, 2013,
- 3. Pelea Cosmin-Razvan, Algebra Symposium, Romania, 2013,
- 4. **Kohr Gabriela**, International Symposium on Geometric Function Theory and Applications, Ohrid, R. Macedonia (GFTA2012), Macedonia, 2012,
- 5. **Kohr Mirela**, International Symposium on Geometric Function Theory and Applications (GFTA 2012), Macedonia, 2012,
- Kohr Gabriela , International Conference on Complex Analysis and Related Topics. The 13th Romanian-Finnish Seminar ", June 26-30, 2012, Ploieşti, Romania,

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Representations in professional organizations

- 7. **Petrusel Adrian-Olimpiu**, International Conference on Fixed Point Theory and its Applications, Romania, 2012,
- 8. **Precup Radu**, International Conference on Fixed Point Theory and Applications ICFPTA-2012, Romania,
- 9. Salagean Grigore-Stefan , 8-th International Symposium on Geometric Function Theory and Applications GFTA 2012, Ohrid (Macedonia), 2012.



Department of Computer Science



Profile

The department is responsible for organizing studies in the domain of Computer Science. The bachelor degree provides the students with the appropriate knowledge and tools for further master degree studies and/or for their professional activity in IT, education, administration, industry or finance.

The purposes of the programme are the following

- \cdot to teach fundamental concepts of computer science and mathematics
- · to teach problem-solving methods and techniques
- \cdot to teach how to use software engineering concepts and methods in software development and maintenance
- \cdot to give students the appropriate knowledge and skills related to design and administration of database systems and computer networks
- · to teach students new scientific and didactic approaches
- to give students the appropriate motivation and abilities



Department of Computer Science

Profile

related to team work, professional communication and development.

The holder of this diploma may activate in any institution or company, occupying positions like analyst, programmer, developer, system designer, system engineer, network/database administrator, software project manager, computer science consultant, administrator of educational platforms. If the holder of diploma is also a graduate of the pedagogical module, he/she may be a teacher of Computer Science in any educational institution of gymnasial level.

The research activities in the department are organized in seven research groups, in different fields of Computer Science. The department supervises one research journal, and organizes an international conference every odd year, and a national conference every even year.





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Emeritus Professors



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- Intelligence, Machine
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- GAL-CHIS Calin , Doctoral Student
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Research groups in Computer Science

- 1. Intelligent Systems
- 2. Applied Computational Intelligence http://www.cs.ubbcluj.ro/~ica/
- 3. Programming and Software Engineering
- 4. Data Analysis (http://www.cs.ubbcluj.ro/~da/)
- 5. Distributed Systems and Web Communications
- 6. Interdisciplinary Applications
- 7. DATAMIN (http://datamin.ubbcluj.ro/)

PhD Thesis Academic year 2012-2013

- 1. NAGY Reka Evolutionary Techniques in Computational Game Theory, adviser: Prof. univ. dr. DUMITRESCU Dumitru
- 2. BOCSI E.A. Botond Attila Model Learning for Robot Control, adviser: Prof. univ. dr. POP Horia Florin
- LEFKOVITS Szidónia Metode robuste de detecție a obiectelor cu aplicații în detecția facială, adviser: Prof. univ. dr. POP Horia F.



Articles in national journals

1. Cojocar Grigoreta Sofia, Guran Adriana-Mihaela, Aspecte specifice privind utilizabilitatea siturilor web pentru admiterea la facultate, REVISTA ROMANA DE INTERACTIUNE OM -CALCULATOR, Categ CNCSIS B+, 5,3, 2012, P.97 - 108

Proceeding of ISI and professional conferences

- Craciun Mihai-Florin-Gabriel, Motogna Simona-Claudia, Lazar Ioan, Towards Better Testing of fUML Models, conferinta ISI, IEEE 6th International Conference on Software Testing, Verification, and Validation (ICST 2013), IEEE 6th International Conference on Software Testing, Verification, and Validation (ICST 2013), IEEE Computer Society, Editor: IEEE Computer Society, 000000000, , 2013, P. 0-1
- 2. Chin Wei-Ngan, Asankhaya Sharma, Le Quang Loc, Craciun Mihai-Florin-Gabriel, *Towards Complete Specifications with an Error Calculus*, conferinta ISI, 5th NASA Formal Methods Symposium, LNCS 7871, Springer Verlag, Editor: Guillaume Brat, Neha Rungta, Arnaud Venet, 000000000, 2013, P. 1-15
- 3. Chin Wei-Ngan, Qin Shengchao, He Guanhua, Craciun Mihai-Florin-Gabriel, Automated Specification Discovery in a Combined Abstract Domain, conferinta ISI, 15th International Conference on Formal Engineering Methods, 2013, Springer Verlag, 000000000, , 2013, P. 100-116
- 4. Nagy Reka, Suciu Mihai-Alexandru, Dumitrescu Dumitru, Exploring Lorenz Dominance, conferinta ISI, SYNASC 2013, 14th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, IEEE, Editor: "", 978-0-7695-4934-7, , 2013, P. 254-259



- 5. Suciu Mihai-Alexandru, Pallez Denis, Cremene Marcel, Dumitrescu Dumitru, Adaptive MOEA/D for QoS-based web service composition, conferinta ISI, EvoCop, 7832, Springer Berlin Heidelberg, Editor: Middendorf, Martin; Blum, Christian, 978-3-642-37197-4, , 2013, P. 72-84
- Mocean Loredana, Ciaca Monica-Iuliana, Vancea Alexandru-Ioan, Possibilities of parallel processing at the level of economic programs in groups of firms, conferinta ISI, The 12 International Conferences of Informatics in Economy Bucharest 2013, Conference Proceedings of the 12 ICIEERBT, ASE, Editor: *, 2284-7472, , 2013, P. 31-36
- Ciaca Monica-Iuliana, Mocean Loredana, Vancea Alexandru-Ioan, Analisys of Data Dependence. Applications in Groups of Firms, conferinta ISI, International Conference on Informatics in Economy, Proceedings of the 12th International Conference on Informatics in Economy, 25-28 April, Bucharest, Romania, Bucharest University of Economic Studies Press, Editor: University of Economic Studies, Bucharest, 2284-7472, 2013, P. 202-209
- 8. Andreica Anca-Mirela, Chira Camelia, Dynamics of Networks Evolved for Cellular Automata Computation, conferinta ISI, International Workshop on Hybrid Artificial Intelligence Systems (HAIS 2012), Salamanca, Spain, Hybrid Artificial Intelligent Systems, vol. 7208-7209, Springer-Verlag, -, , 2012, P. 359-368
- Andreica Anca-Mirela, Chira Camelia, The Role of Crossover in Evolutionary Approaches to Resource-Constrained Project Scheduling, conferinta ISI, International Conference on Intelligent Systems Design and Applications (ISDA 2012), Proceedings, -, -, , 2012, P. 200-205
- 10. **COMBEMALE Benoit, Chiorean Ioan Danut, COMBEMALE Benoit,** *The 8th Educators' Symposium @ MODELS 2012: software modeling in education,* conferinta ISI, MODELS 2012 -Educator's Symposium, Proceedings of the 8th edition of the



Educators' Symposium, ACM Digital Library, Editor: Ruth Breu and Colin Atkinson, DOI : 10.1145/2425936.2425937, , 2012, P. 1-4

- Chira Camelia, Hatami Nima, Hybrid Evolutionary Algorithm with a Composite Fitness Function for Protein Structure Prediction, conferinta ISI, Intelligent Data Engineering and Automated Learning, 7345, Springer, Editor: LNCS, "", 2012, P. 184-191
- Armano Giuliano, Chira Camelia, Hatami Nima, Ensemble of Binary Learners for Reliable Text Categorization with a Reject Option, conferinta ISI, 7th International Workshop on Hybrid Artificial Intelligence Systems, 7208, Springer, Editor: "", "", 2012, P. 137-146
- 13. Cioban Vasile, Prejmerean Vasile, Culic Bogdan, Ghiran Ovidiu, Image Calibration for Color Comparison, conferinta ISI, Proceedings of 2012 IEEE International Conference on Automation, Quality and Testing, Robotics - AQTR 2012, I, IEEE Catalog Number: CFP12AQT-CDR,, Editor: Liviu Miclea, Ioan Stoian, ISBN: 978-1-4673-0703-1, , 2012, P. 332-336
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1. Czibula Gabriela, UBB Prize for scientific excellence 2012



Publications

Invited conferences

 Niculescu Virginia, internationale, Franta, Univ. Orleans LIFO- Le Laboratoire d\, Titlu: Workshop: FraDeCoPP: Second Workshop on Frameworks for the Development of Correct (parallel) Programsnov 2012, 2012, calitate invitat.

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- 1. Czibula Gabriela, Crisan Gloria Cerasela, Pintea Camelia, Czibula Istvan-Gergely, Soft computing approaches on the bandwidth problem, Science_Citation_Expanded, INFORMATICA, Vol. 24, No. 1, 2013, P.1 - 12
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National Projects - coordinator/ director

- 1. Chira Camelia, EMERGENTA, AUTO-ORGANIZARE SI EVOLUTIE: NOI MODELE COMPUTATIONALE IN STUDIUL SISTEMELOR COMPLEXE, proiect national, CNCSIS II, MODELARE SI TEORIA CALCULULUI, 2012 - 2013.
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International and national projects – member

- 1. Andreica Anca-Mirela EMERGENTA, AUTO-ORGANIZARE SI EVOLUTIE: NOI MODELE COMPUTATIONALE IN STUDIUL SISTEMELOR COMPLEXE, CNCSIS II, MODELARE SI TEORIA CALCULULUI,2010-2013
- 2. Boian Florian-Mircea Formarea profesionala a cadrelor didactice din invatamantul preuniversitare pentru noi oportunitati de dezvoltare in cariera, AMPOSDRU, Profesionisti in educatie si formare,2010-2012
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- 4. Gaceanu Radu-Dan S-GAIA: Sistem pentru gestiunea si analiza inteligenta a datelor medicale in vederea imbunatatirii strategiilor de raspuns in cazul unor afectiuni acute si cronice, UEFISCDI, SISTEME SOFTWARE,2012-2014
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- 9. **Prejmerean Vasile** *NOI GENERATII DE BIOMATERIALE PENTRU STOMATOLOGIA COSMETICA*, UEFISCDI, STIINTA MATERIALELOR COMPOZITE,2012-2014



Representations in professional organizations Members of Editorial Boards of International and National Journals

- 1. **Boian Florian-Mircea**, International Journal of Intelligent Computing & Information Science, from 2000, member
- 2. **Grebla Horea-Adrian**, Broad Research in Artificial Intelligence and Neuroscience, from 2010, copyeditor
- 3. **Grosan Crina Daniela**, International Journal of Computational Intelligence Research, from 2008, Editor
- 4. **Grosan Crina Daniela**, International Journal of Software Reuse, from 2007, Editor
- 5. **Grosan Crina Daniela**, International Journal of Theoretical and Applied Computer Sciences, from 2007, Editor
- 6. **Grosan Crina Daniela**, International Journal of Innovative Computing and Applications, from 2007, Editor
- 7. **Grosan Crina Daniela**, International Journal of Unified Software Engines, from 2007, Editor
- 8. **Oltean Mihai-Nicolae**, International Journal of Innovative Computing and Applications, from 2007, member
- 9. **Pop Horia-Florin**, Studia Universitatis Babes-Bolyai, Series Informatica, from 2001, executive editor
- 10. **Pop Horia-Florin**, Scientific Bulletin of the "Petru Maior" University of Tîrgu Mureş, from 2010, member
- 11. **Vescan Andreea**, International Journal of Web Applications, from 2009, member.
- 12. **Boian Florian-Mircea**, STUDIA UNIVERSITATIS BABES-BOLYAI.INFORMATICA, from 1999, member
- 13. Boian Florian-Mircea, CARPATHIAN JOURNAL OF MATHEMATICS, CONTINUARE A REVISTEI "BULETINUL STIINTIFIC AL UNIVERSITATII BAIA MARE", SERI FASCICOLA MATEMATICA-INFORMATICA, from 2001, member
- 14. **Frentiu Militon**, STUDIA UNIVERSITATIS BABES-BOLYAI. INFORMATICA, from 1995, redactor
- 15. **Guran Adriana-Mihaela**, REVISTA ROMANA DE INTERACTIUNE OM - CALCULATOR, from 2010, member





- 16. **Motogna Simona-Claudia**, STUDIA UNIVERSITATIS BABES-BOLYAI. INFORMATICA, from 2006, member
- 17. **Parv Bazil**, ACTA UNIVERSITATIS APULENSIS MATHEMATICS INFORMATICS, from 2001, member
- 18. **Parv Bazil**, STUDIA UNIVERSITATIS BABES-BOLYAI. INFORMATICA, from 1996, member
- 19. **Tambulea Leon**, STUDIA UNIVERSITATIS BABES-BOLYAI. INFORMATICA, from 1991, member

Reviewers of Editorial Boards of International and National Journals

- 1. Czibula Gabriela, Studia Informatica, from 2002
- 2. Czibula Gabriela, BRAIN, in 2012
- 3. Czibula Istvan-Gergely, Studia Informatica, in 2012
- 4. **Niculescu Virginia**, Studia Universitatis Babes-Bolyai Series Informatica, from 2002
- 5. Cojocar Grigoreta Sofia, REVISTA ROMANA DE INTERACTIUNE OM - CALCULATOR, in 2012
- 6. **Cojocar Grigoreta Sofia**, STUDIA UNIVERSITATIS BABES-BOLYAI. INFORMATICA, from 2008
- 7. **Motogna Simona** International *Journal* of Computers, Communications & Control, 2013





Members of Organizing and Scientific Committees of International and National Conferences

- **1. Motogna Simona-Claudia**, 6th Balkan Conference in Informatics, Grecia, 2013, Program Committee Member
- 2. **Motogna Simona-Claudia**, KEPT 2013, Romania, 2013, Chair and Scientific Committee member
- 3. **Niculescu Virginia**, 7th International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS-2013), China, 2013, PC member
- 4. **Niculescu Virginia**, Engineering Object Oriented Parallel Software (EOOPS) AINA 2013, Spania, 2013, PC member
- 5. **Sacarea Christian**, 6th International Conference on Security on Information Technology and Communications, Romania, 2013, member
- 6. **Chiorean Ioan Danut** , MODELS 2012, Austria, 2012, organizer and PC membru
- 7. **Craciun Mihai-Florin-Gabriel**, 14th ECOOP Workshop on Formal Techniques for Java-like Programs, Belarus, 2012, Program Committee Member
- 8. **Craciun Mihai-Florin-Gabriel**, The Sixth IEEE International Symposium on Theoretical Aspects of Software Engineering, China, 2012, Program Committee Member
- 9. **Czibula Gabriela** , Conferinta: CONSILR 2012, Romania, 2012, member
- 10. **Motogna Simona-Claudia**, 5th Balkan Conference in Informatics, 2012, member
- 11. **Pop Horia-Florin** , MACS 9th, Ungaria, 2012, Member Steering Committee
- 12. Chisalita-Cretu Maria-Camelia, CSSC 2012, 2012, member
- 13. **Guran Adriana-Mihaela**, INTERACT 2013 14th IFIP TC13 Conference on Human-Computer Interaction, 2013, member
- 14. **Cojocar Grigoreta Sofia**, Conferinta Nationala de Interactiune Om-Calculator RoCHI 2012, 2012, PC President
- 15. **Guran Adriana-Mihaela**, Conferinta Romana de Interactiune Om-Calculator, 2012, member





Department of Mathematics and Computer Science, Hungarian line



Profile

The department is responsible for ongoing education in Hungarian in the frame of the Faculty of Mathematics and Computer Science, and consists of 4 professors, 8 associate professors, 10 lecturers, 5 assistants and 7 PhD students.

The department provides complete study programs in Hungarian for the following specializations:

- Bachelor degree: Mathematics, Mathematics and Computer Science, Computer Science;
- Master degree: Enterprise Application Programming & Development, Optimization of Computational Models, Didactic Mathematics, Computational Mathematics.

The members of the department are envolved in research groups of the faculty. The main research directions include: geometric theory of functions, stochastic analysis, optimization theory, variation calculus, nonlinear analysis, theory of finite dimension algebraic represention, celestial mechanics, artificial intelligence, databases, computational modeling and simulation, graphics and computational geometry, parallel programming a.s.o.





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Analysis and Optimization: Prof. PhD. Kassay Gábor, Prof. PhD. Kolumbán József, Assoc.Prof. PhD. Finta Zoltán (http://www.cs.ubbcluj.ro/~grupanopt/)

Geometric Analysis: Prof. PhD. Varga Csaba, Lect. PhD. Mezei Ildiko

Function Theory: Prof. PhD. Bulboacă Teodor (http://math.ubbcluj.ro/~gctf/)

Nonlinear Operators and Differential Equations: Lect. PhD. András Szilárd (http://www.math.ubbcluj.ro/~nodeacj/soned.html)

Numeric and Stochastic Analysis: Assoc.Prof. PhD. Soós Anna, Lect. PhD. Somogyi Ildikó (http://www.cs.ubbcluj.ro/wpcontent/uploads/ans-2012.pdf)

Simulation, Modeling, Control and Visualization: Lect. PhD. Libál András, Assoc.Prof. PhD. Ferenc Szenkovits, Ruff Laura (http://www.cs.ubbcluj.ro/~smcv/)

Data Analysis: Assoc.Prof. PhD. Varga Viorica (http://www.cs.ubbcluj.ro/~da/)

Datamin: Assoc.Prof. PhD. Csató Lehel, Lect. PhD. Bodó Zalán, Lect. PhD. Darvay Zsolt, Asist. PhD. Jakab Hunor (http://datamin.ubbcluj.ro/)



Projects

National projects - coordinator/ director

- 1. Csato Lehel, Metode neparametrice in instruirea automata a masinilor: aplicatii în robotica si analiza datelor, proiect national, UEFISCDI, MODELARE SI TEORIA CALCULULUI, 2012 2013,
- 2. **Kassay Gabor**, *Structura si senzitivitatea solutiilor inegalitatilor variationale, problemelor de optimizare si echilibru in ipoteze de monotonie generalizata*, proiect national, UEFISCDI, ANALIZA FUNCTIONALA, TEORIA OPERATORILOR, ANALIZA CONVEXA, 2012 2013,
- 3. Libal Jozsef-Andras, *Studiul sistemelor coloidale de spin ice artificiale*, proiect national , UEFISCDI, TEORIA STARII CONDENSATE, 2012 2013,
- 4. Roth Agoston-Istvan, Probleme recente in modelarea geometrica asistata de calculator, proiect national, UEFISCDI, ANALIZA NUMERICA SI TEORIA APROXIMARII, 2012 - 2013,

International projects

- 1. Andras Szilard Karoly, *PRIMAS Promoting inquiry in Mathematics and science education across Europe*, project international, Comisia Europeana II, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE, 2012 - 2013,
- 2. **Soos Anna**, *DSL 2013 Programul Sectorial ERASMUS, Actiunea Programe Intensive*, project international , Comisia Europeana II, SISTEME SOFTWARE, 2012,

Members in projects:

- 1. Andras Szilard Karoly Studiul functiilor speciale cu metode din analiza reala si complexa, CNCSIS II, ANALIZA REALA, TEORIA MASURII, 2013-2014
- 2. Andras Szilard Karoly Metode operatoriale pentru sisteme neliniare si aplicatii, UEFISCDI, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2011-2014
- 3. BOCSI Botond Attila Metode neparametrice in instruirea





Projects

automata a masinilor: aplicatii în robotica si analiza datelor, UEFISCDI, MODELARE SI TEORIA CALCULULUI,2011-2014

- 4. **BOCSI Botond Attila** *DSL 2013 Programul Sectorial ERASMUS, ctiunea Progframe Intensive*, Comisia Europeana II, SISTEME SOFTWARE,2012-2012
- 5. Bodo Zalan-Peter Metode neparametrice in instruirea automata a masinilor: aplicatii în robotica si analiza datelor, UEFISCDI, MODELARE SI TEORIA CALCULULUI,2011-2014
- 6. **Bodo Zalan-Peter** *DSL 2013 Programul Sectorial ERASMUS, ctiunea Progframe Intensive*, Comisia Europeana II, SISTEME SOFTWARE,2012-2012
- 7. **Csato Lehel** *DSL* 2013 Programul Sectorial ERASMUS, ctiunea Progframe Intensive, Comisia Europeana II, SISTEME SOFTWARE,2012-2012
- 8. Horvath Zoltan DSL 2013 Programul Sectorial ERASMUS, ctiunea Progframe Intensive, Comisia Europeana II, SISTEME SOFTWARE,2012-2012
- 9. Jakab Hunor-Sandor Metode neparametrice in instruirea automata a masinilor: aplicatii în robotica si analiza datelor, UEFISCDI, MODELARE SI TEORIA CALCULULUI,2011-2014
- 10. Jakab Hunor-Sandor DSL 2013 Programul Sectorial ERASMUS, ctiunea Progframe Intensive, Comisia Europeana II, SISTEME SOFTWARE,2012-2012
- 11. **Mezei Ildiko Ilona** *Simetrii in probleme eliptice: tehnici euclidiene si ne-euclidiene*, UEFISCDI, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2011-2013
- 12. Roth Agoston-Istvan Studiul sistemelor coloidale de spin ice artificiale, UEFISCDI, TEORIA STARII CONDENSATE,2011-2014
- 13. Soos Anna *PRIMAS Promoting inquiry in Mathematics and science education across Europe*, Comisia Europeana II, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2010-2013
- 14. Suteu-Szollosi Stefan-Lucian Algebre grupale si algebre

Projects

Ringel-Hall, CNCSIS II, ALGEBRA, LOGICA SI TEORIA NUMERELOR,2010-2013

- 15. **Suteu-Szollosi Stefan-Lucian** *DSL 2013 Programu Sectorial ERASMUS, ctiunea Progframe Intensive*, Comisia Europeana II, SISTEME SOFTWARE,2012-2012
- 16. Szanto Csaba-Lehel Algebre grupale si algebre Ringel-Hall, CNCSIS II, ALGEBRA, LOGICA SI TEORIA NUMERELOR,2010-2013
- 17. Varga Csaba-Gyorgy Simetrii in probleme eliptice: tehnici euclidiene si ne-euclidiene, UEFISCDI, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2011-2013
- 18. **Varga Csaba-Gyorgy** *Sisteme Neliniare in Analiza Matematica si Aplicatii*, CNCSIS II, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2010-2013
- 19. **Varga Viorica** Sisteme Neliniare in Analiza Matematica si Aplicatii, CNCSIS II, ECUATII DIFERENTIALE, INTEGRALE SI CU DERIVATE PARTIALE,2010-2013







Representations in professional organizations

- 1. **Sandor Jozsef**, in Corporatia Doctorilor Academiei Ungare, from 2000 member
- 2. Sandor Jozsef, in Romanian mathematical society, 2012, member
- 3. **Sandor Jozsef**, *Reprezentare nationala*, in Romanian mathematical society, 2013, membru
- 4. **Sandor Jozsef**, in Working Group on Generalized Convexity, from 2012, membera
- 5. **Sandor Jozsef**, in Farkas Gyula Association for mathematics and computer science, from 2012, member
- 6. **Sandor Jozsef**, in Rado Ferenc Mathematical Society, from 2012, member
- 7. **Sandor Jozsef**, in Research Group Mathematical Inequalities Applications, from 2012, member
- 8. **Sandor Jozsef**, in American Mathematical Society, from 2012, member
- 9. **Sandor Jozsef**, in European mathematical Society, from 2012, member
- 10. **Sandor Jozsef**, in Janos Bolyai Mathematical Society, from 2012, member
- 11. **Soos Anna**, in Fundatia Universitara Maghiara din Cluj, from 2012, president
- 12. **Soos Anna**, in Asociatia Farkas Gyula pentru Matematica si Informatica, from 2012, vicepresident
- 13. **Szenkovits Ferenc**, in International Astronomical Union, fro 2012, member
- 14. **Szenkovits Ferenc**, in European Astronomical Society, from 2012, member
- 15. **Szenkovits Ferenc**, in Societatea de Stiinte Matematice din Romania, from 2012, member
- 16. **Szenkovits Ferenc**, in Consiliul National Roman de Astronomie, from 2012, member
- 17. **Szenkovits Ferenc**, in Hungarian Astronomical Society, from 2012, member
- 18. **Szenkovits Ferenc**, in Asociatia Farkas Gyula pentru matematica si informatics, from 2012, president



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Representations in professional organizations

International Editorial Boards:

- 1. **Bulboaca Teodor**, International Journal of Mathematics and Mathematical Sciences, from 2006, member
- 2. Gasko Noemi, Memmetic Computing, from 2011, reviewer
- 3. **Kassay Gabor**, Advances in Nonlinear Variational Inequalities, from 2000, editor
- 4. **Kassay Gabor**, Studia Universitatis Babeş-Bolyai, from 2011, member
- 5. **Sandor Jozsef**, Journal of Inequalities in Pure applied mathematics, from 2001, Foundation Editor
- 6. **Sandor Jozsef**, Advances in Nonlinear variational inequalities and Applications, from 2001, Associate editor
- 7. **Sandor Jozsef**, Advanced Studies in Contemporary mathematics, from 2003, Associate Editor
- 8. **Sandor Jozsef**, Proccedings of the Jangjeon Mathematical Society, from 2005, Associate editor
- 9. **Sandor Jozsef**, Notes in Number Theory and Discrete mathematics, from 1993, Associate editor
- 10. **Sandor Jozsef**, Bulletin of mathematical analysis and applications, from 2007, Associate editor
- 11. **Sandor Jozsef**, ISST Journal of Mathematics and Computer Sciences, from 2009, Associate Editor
- 12. Sandor Jozsef, Scientia Magna, from 2009, Associate Editor
- 13. **Sandor Jozsef**, Research Journal of Pure Algebra, from 2011, Associate Editor
- 14. **Sandor Jozsef**, International Journal of Contemporary Mathematics, from 2011, Associate Editor
- 15. Sandor Jozsef, MathProblems, from 2010, Associate Editor
- 16. **Sandor Jozsef**, Octogon Mathematical Magazine, from 1993, Associate Editor
- 17. **Sandor Jozsef**, IMVI Open Bulletin of Mathematics, from 2010, Associate Editor

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Representations in professional organizations

- 18. **Sandor Jozsef**, Konuralp Journal of Mathematics, from 2012, Associate Editor
- 19. **Sandor Jozsef**, IMVI Open Journal of Mathematics, from 2010, Associate Editor
- 20. **Sandor Jozsef**, Advances in Inequalities and Applications, from 2012, Associate Editor
- 21. **Sandor Jozsef**, Conference Papers in Mathematics, from 2012, Associate Editor
- 22. **Sandor Jozsef**, MATHEMATICAL INEQUALITIES & APPLICATIONS, from 1999, Associate Editor
- 23. **Sandor Jozsef**, APPLICABLE ANALYSIS AND DISCRET MATHEMATICS, from 2004, Associate Editor
- 24. Szenkovits Ferenc, Studia Mathematica, from 2000, member
- 25. **Varga Csaba-Gyorgy**, ABSTRACT AND APPLIED ANALYSIS, from 2012, Editor

National Editorial Board

- 1. Sandor Jozsef, Matlap, from 2000, Associate Editor
- 2. **Sandor Jozsef**, Erdelyi Matematikai lapok, from 2003, Associate Editor
- 3. **Soos Anna**, STUDIA UNIVERSITATIS BABES-BOLYAI. MATHEMATICA, from 2009, member
- 4. Szenkovits Ferenc, Matlap, from 1980, member
- 5. Szenkovits Ferenc, Firka, from 2000, member
- 6. **Varga Csaba-Gyorgy**, STUDIA UNIVERSITATIS BABES-BOLYAI.MATHEMATICA, from 2009, Editor
- 7. Varga Csaba-Gyorgy, MATHEMATICA, from 2004, member

Reviewer for international and national journals:

1. Bulboaca Teodor, Journal of Complex Analysis, 2012







Representations in professional organizations

- 2. Bulboaca Teodor, Asian-European Journal of Mathematics, 2012
- 3. **Bulboaca Teodor**, Journal of the Egyptian Mathematical Society, 2012
- 4. **Bulboaca Teodor**, Bulletin of International Mathematical Virtual Institute, 2012
- 5. **Bulboaca Teodor**, ANALELE STIINTIFICE ALE UNIVERSITATII AL I CUZA DIN IASI-SERIE NOUA-MATEMATICA, 2012
- 6. **Bulboaca Teodor**, INTERNATIONAL JOURNAL OF PHYSICAL SCIENCES, 2012
- 7. Bulboaca Teodor, JOURNAL OF NUMBER THEORY, 2012
- 8. Bulboaca Teodor, ACTA MATHEMATICA SCIENTIA, 2012
- 9. **Bulboaca Teodor**, INTEGRAL TRANSFORMS AND SPECIAL FUNCTIONS, 2012
- 10. **Bulboaca Teodor**, JOURNAL OF CONTEMPORARY MATHEMATICAL ANALYSIS-ARMENIAN ACADEMY OF SCIENCES, 2012
- 11. Csato Lehel, Annales Univ Sci Budapest, Sect Comp, 2012
- 12. **Csato Lehel**, JOURNAL OF MACHINE LEARNING RESEARCH, 2012
- 13. **Csato Lehel**, ANNALS OF MATHEMATICS AND ARTIFICIAL INTELLIGENCE, 2012
- 14. **Csato Lehel**, IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS, 2012
- 15. Csato Lehel, SOFT COMPUTING, 2012
- 16. **Csato Lehel**, International Joint Conference on Neural Networks, 2012
- 17. **Darvay Zsolt**, ORION : journal of the Operations Research Society of South Africa, 2012
- 18. **Darvay Zsolt**, NUMERICAL FUNCTIONAL ANALYSIS AND OPTIMIZATION, 2012
- 19. Darvay Zsolt, JOURNAL OF GLOBAL OPTIMIZATION, 2012
- 20. Darvay Zsolt, NUMERICAL ALGORITHMS, 2013





- 21. **Darvay Zsolt**, APPLIED MATHEMATICS AND COMPUTATION, 2013
- 22. **Szanto Csaba-Lehel**, JOURNAL OF PURE AND APPLIED ALGEBRA, 2012
- 23. Szanto Csaba-Lehel, COMMUNICATIONS IN ALGEBRA, 2012
- 24. **Szenkovits Ferenc**, ASTROPHYSICS AND SPACE SCIENCE, 2012
- 25. **Szenkovits Ferenc**, CELESTIAL MECHANICS & DYNAMICAL ASTRONOMY, 2013
- 26. Varga Csaba-Gyorgy, Complex Variable, 2012
- 27. Varga Csaba-Gyorgy, NONLINEAR ANALYSIS-REAL WORLD APPLICATIONS, 2012
- 28. Varga Csaba-Gyorgy, FIXED POINT THEORY, 2012
- 29. Varga Csaba-Gyorgy, JOURNAL OF GLOBAL OPTIMIZATION, 2012
- 30. Varga Csaba-Gyorgy, JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, 2012

Member in organizing and scientific committees of international conferences:

- 1. Varga Csaba-Gyorgy , Advances in Differential Equations: symmetrizations and related topics. , Romania, 2013, member
- 2. **Bulboaca Teodor**, Geometric Function Theory and Applications, Macedonia, 2012, Scientific Committee member
- 3. **Robu Judit**, 9th Joint Conference on Mathematics and Computer Science (9th MaCS), Ungaria, 2012, member
- 4. **Soos Anna**, 9th Joint Conference on Mathematics and Computer Science, Ungaria, 2012, member
- 5. **Szenkovits Ferenc**, DYNAMICAL AND PHYSICAL PROCESSES IN CELESTIAL BODIES – AN ASTROPHYSICAL INSIGHT, Romania, 2012, co-organizer





