PROGRAM

Monday, June 23rd, 2003

09:30–11:00

OPENING CEREMONY
Message of the President of Romania Mr. Ion Iliescu

Coffee

11:30–12:15  Solomon Marcus  Mathematics in Romania in the last 60 years

Lunch

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

14:30–16:40 Chairman: Vasile Brînzănescu

14:30–15:15  Dan Burghelea  Laplace transform from topology to spectral geometry
15:20–16:05  Mihnea Colțoiu  On the coverings of the complement of a point in a normal Stein space of dimension 2
16:10–16:40  Tudor Zamfirescu  A trip on a convex surface

Sections 7 and 9: Functional Analysis, Operator Theory and Numerical Analysis

14:30–15:40 Chairman: Francesco Altomare

14:30–15:15  Heinz Gonska  A survey on some results for Bernstein-type operators
15:20–15:40  Nicolae Popa  Some problems in harmonic analysis for matrices

Section 4: Real and Complex Analysis, Potential Theory

14:30–16:30 Chairman: Sanford Miller

14:30–15:15  Olli Martio  Potential Theory of quasiminimizers
15:20–15:50  Cornel Udrea  On generalized Laplace equation and nonlinear operators
15:50–16:10  Eugen Popa  Semidynamical systems on ordered convex cones
16:10–16:30  Daniel Breaz  On univalent integral operator

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

14:30–16:35 Chairman: Irena Lasiecka

14:30–15:15  Hatvani Laslo  Stability properties of second order linear differential equations with random coefficients
15:20–16:05  Yvon Maday  TBA
16:05–16:35  Dan Socolescu  On the unique solvability and the convergence at infinity to the prescribed value of the Leray solution to the two-dimensional stationary Navier-Stokes equations

Sections 8, 10 and 11: Probability, Mathematical Statistics, Computer Science, Mathematical Programming and Operation Research

14:30–16:15 Chairman: I.M. Stancu-Minasian

14:30–15:15  Dumitru Lozovanu  Algorithms for determining the optimal strategies in dynamic games
15:15–15:45  Ştefan Mititelu  Invex functions: invexity conditions and properties
15:45–16:15  Dumitru Solomon  Algorithms for solving polynomial fractional programming problems

Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics

15:00–16:30 Chairman: Mihaela Suliciu

15:00–15:45  Enrique Sanchez-Palencia  Singular perturbations with unbounded energy and applications to thin shell theory
15:45–16:30  Nicolae Cristescu  A model for slow motions of natural slopes

Coffee

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology
17:00–19:10 Chairman: Dan Burghelea

17:00–17:30  Mitrofan Ciobanu  Mappings and Prokhorov spaces
17:35–17:55  Radu Miron  The Geometries of Lagrange and Hamilton Spaces
18:00–18:30  Mefodie Rață  Conditions for the functional completeness in the simplest extensions of dual intuitionistic logic
18:30–18:50  Ion Mihai  Geometric inequalities for warped product submanifolds
18:50–19:10  Mihai Staic  Hopf Algebras and Knot Theory

Section 4: Real and Complex Analysis, Potential Theory

17:00–18:45 Chairman: Olli Martio

17:00–17:30  Dan Timotin  Almost orthonormal sequences in certain function spaces
17:35–17:55  Nicu Boboc  On the strongly supermedian functions and kernels
18:00–18:20  Emil Popescu  Some Dirichlet forms generated by PD-operators
18:25–18:45  Walter Farkas  Bessel potential spaces associated to a continuous negative definite function

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

17:00–19:05 Chairman: Constantin Codenmeanu

17:00–17:30  Nicolae Jitărașu  On the Sobolev boundary value problem with regular and singular boundary conditions for elliptic equations
17:30–18:00  Dan Pascali  On hyperbolic $A$-properness in Banach spaces
18:05–18:35  Vasile Postolica  Recent results on pareto efficiency and related topics
18:35–19:05  Petre Jebelean  Nontrivial solutions for a class of nonsmooth inequality problems

Sections 8, 10 and 11: Probability, Mathematical Statistics, Computer Science, Mathematical Programming and Operation Research

17:00–18:40 Chairman: Ștefan Mititelu
<table>
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<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>17:00–17:20</td>
<td>Anton Bătătorescu</td>
<td>Optimality and Duality for a Nondifferentiable class of Minimax Fractional Programming</td>
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<tr>
<td>17:20–17:40</td>
<td>Anatol Godonoaga</td>
<td>Stochastic algorithms for solving optimization problems</td>
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<tr>
<td>17:40–18:00</td>
<td>Bogdana Pop</td>
<td>A method of solving fully fuzzified linear fractional programming problems</td>
</tr>
<tr>
<td>18:00–18:20</td>
<td>Cristian Niculescu</td>
<td>Optimality conditions and duality for multiobjective fractional programming problems involving n-arcwise connected and related functions</td>
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<tr>
<td>18:20–18:40</td>
<td>Alexandra Tkacenko</td>
<td>The multiobjective linear fractional programming model</td>
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<tr>
<td>18:40–19:00</td>
<td>I.M. Stancu-Minasian</td>
<td>Efficiency and proper efficiency in multiobjective stochastic programming</td>
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Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics

<table>
<thead>
<tr>
<th>Time</th>
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<tr>
<td>17:00–19:10</td>
<td>Mihaela Suliciu</td>
<td>Chairman</td>
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<tr>
<td>17:00–17:30</td>
<td>Mircea Cazacu Dimitrie</td>
<td>On the boundary conditions in three-dimensional viscous fluid flows</td>
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<td>17:30–17:50</td>
<td>Mirela Kohr</td>
<td>Boundary integral method for an oscillatory Stokes flow past a solid particle</td>
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<td>17:50–18:10</td>
<td>Mira Anisiu</td>
<td>Advances in the inverse problem of dynamics</td>
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<tr>
<td>18:10–18:30</td>
<td>Richard Selescu</td>
<td>The supersonic flow around a Rogallo conical thin delta wing with two-semicircular directrix</td>
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<tr>
<td>18:30–18:50</td>
<td>Silviu Sburlan</td>
<td>Steady state flow as a bifurcation problem</td>
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<tr>
<td>18:50–19:10</td>
<td>Marian Şuran</td>
<td>From universe to Universe. Quantising a general category</td>
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</table>
Tuesday, June 24th, 2003

Sections 1,2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

09:00–12:00 Chairman: Alexandru Buium

09:00–09:45 Ștefan Papadima  Topology of open algebraic varieties
10:00–10:45 Preda Mihailescu  Zooming into Catalan’s conjecture

Coffee

11:15–12:00 Andrei Iordan  TBA

Sections 7 and 9: Functional Analysis, Operator Theory and Numerical Analysis

09:00–10:45 Chairman: Romulus Cristescu

09:00–09:45 Francesco Altomare  Affine projections on adapted subalgebras
10:00–10:45 László Zsidó  Non-commutative multiple recurrence theorems

Coffee

11:15–12:35 Chairman: László Zsidó

11:15–11:35 Mihai Voicu  A special class of semigroups
11:35–11:55 Liliana Pavel  Ergodic sequences of probability measures on commutative hypergroups
11:55–12:15 Rodica Dănet  Extensions of positive linear operators
12:15–12:35 Gavril Păltineanu  A generalization of the Nachbin’s density theorem for weighted spaces

Section 4: Real and Complex Analysis, Potential Theory

09:00–12:00 Chairman: Petru T. Mocanu

09:00–09:45 Camil Muscalu  Generalization of the Carleson-Hunt theorem in classical analysis
10:00–10:45 Sanford Miller  Differential superordinations
Coffee
11:15–12:00 Richard Fournier Differential Inequalities and Starlikeness

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

09:00–10:45 Chairman: Viorel Barbu

09:00–09:45 Irena Lasiecka Finite dimensionality of attractors in hyperbolic dynamical systems with a nonlinear boundary dissipation
10:00–10:45 Bogdan Bojarski Generalized Riemann-Hilbert transmission problem-Analysis and Geometry

Coffee

11:15–12:00 Chairman: Viorel Barbu

11:15–12:00 Roberto Triggiani Stabilization of Navier-Stokes Equations

Sections 8, 10 and 11: Probability, Mathematical Statistics, Computer Science, Mathematical Programming and Operation Research

09:00–10:30 Chairman: Marius Iosifescu

09:00–09:45 Radu Theodorescu Preserving unimodality by mixing
09:45–10:30 Paul Deheuvels Karhunen-Loewe Expansions for weighted Wiener processes and Brownian Bridges via Bessel Functions

Coffee

11:15–12:15 Chairman: Radu Theodorescu

11:15–11:45 Aurel Spătaru Strengthening classical results concerning large, moderate and small deviations
11:45–12:15 Gheorghita Zbaganu A family of inequalities generating positive nuclei

Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics

09:00–12:35 Chairman: Adelina Georgescu
09:00–09:20  Gheorghe Barbu  An algorithm for determining the structure function of a coherent system
09:20–09:40  Marian Baroni  On the constructive existence of a utility function
09:40–10:00  Radu Burlacu  Numerical solution of an optimal control problem in mathematical biology
10:00–10:20  Mihaela Baroni  Hybrid Phylogenies
10:20–10:40  Gabriel Ciobanu  Molecular networks: from a formal description to a software tool

Coffee

11:15–11:35  Dumitru Ene  A model and program for optimal allocation of resources in agriculture
11:35–11:55  Ion Mierluş-Mazilu  Simulation used to estimate the structural reliability
11:55–12:15  Ilie Mitran  About the optimal times and replacement policies in operation safety
12:15–12:35  Anca Barbu  Aspects regarding the shaping of regional polarization

Lunch

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

14:45–16:30 Chairman: Florian Pop

14:30–15:15  Alexandru Buium  Differential orbit spaces and uniformization
15:20–16:05  Marian Aprodu  Syzygies and geometry of projective curves
16:10–16:30  Florin Damian  On lens polytopes and hyperbolic manifolds

Sections 7 and 9: Functional Analysis, Operator Theory and Numerical Analysis

15:30–16:30 Chairman: Ioan Raşa

15:30–16:00  Ioan Rus  Weakly Picard operators on $L$-spaces and applications
16:00–16:30  Gheorghe Bucur  Compactness in $M_+(X, B)$

Section 4: Real and Complex Analysis, Potential Theory

14:45–16:30 Chairman: Nicu Boboc
14:45–15:30  Adam Lecko  Univalent functions starlike with respect to a boundary point
15:35–16:05  Natalia Zorii  Equilibrium problems for potentials with external fields
16:10–16:30  Emil Moldoveanu  Analysis on space of trajectories

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

14:30–16:30 Chairman: Dan Socoescu

14:30–14:50  Ștefan Radnêf  Structural Stable Solutions of Differential Algebraic Equations
14:50–15:10  Iurie Călin  Invariant conditions for a symmetry center existence for planar cubic differential systems
15:10–15:30  Daniel Pașca  Periodic solutions of second order differential inclusions
15:30–15:50  Abdes-Samed Bernoussi  Spreadability and vulnerability of distributed parameters systems
15:50–16:10  Dana Schloimiuk  On the global theory of planar quadratic vector fields
16:10–16:30  Alexander Prokopenya  Equilibrium solutions in the restricted many-body problems and their stability

Sections 8, 10 and 11: Probability, Mathematical Statistics, Computer Science, Mathematical Programming and Operation Research

14:30–16:30 Chairman: Tiberiu Postelnicu

14:30–14:50  Nicoleta Breaz  Some new statistical tests about the linear regressional model
14:50–15:10  Dumitru Ene  Generalized direct product Error-Correcting Codes
15:10–15:30  Hannelore Lisei  Stochastic dispersion models
15:30–15:50  Jeana-Alice Vătâmânelu  The total variation form of the dominated convergence theorem
15:50–16:10  Jesus Lopez-Fidalgo  Optimal designs for the Arhenius model
16:10–16:30  Camelia Trandafir  Optimal designs for an extension to Michaelis Menten model

Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics

15:00–16:30 Chairman: E. Sanchez-Palencia

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15:00–15:45  Horia Ene  Model of diffusion in partially fissured media
15:45–16:30  Cristian Făciu  On modelling thermo-mechanical interactions accompanying reversible phase transformations

Coffee

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

17:00–19:20 Chairman: Henri Moscovici

17:00–17:30  Mircea Martin  Integral and Maximal Operators in Spin Geometry
17:40–18:10  Stere Ianuș  Harmonic maps and geometric Structures on Manifolds
18:10–18:40  Philippe Ciarlet  Continuité d’une surface en fonction de ses 2 formes fondamentales
18:40–19:00  Nicolae Bonciocat  Upper bounds for the number of factors for a class of polynomials with rational coefficients
19:00–19:20  Ghiocel Groza  On the ring of Newton interpolating series

Sections 7 and 9: Functional Analysis, Operator Theory and Numerical Analysis

17:00–18:00 Chairman: Constantin Niculescu

17:00–17:20  Nicolae Dănet  Hahn-Banach extension theorem and the Riesz decomposition property for the space of regular operators
17:20–17:40  Ileana Bucur  Interpolation in linear ordered spaces
17:40–18:00  Octav Olteanu  A new geometric aspect of the implicit function principle and some applications of the Newton’s method for convex operators

Section 4: Real and Complex Analysis, Potential Theory

17:00–18:45 Chairman: Richard Fournier

17:00–17:30  Mika Koskenoja  Variable exponent Sobolev spaces with zero boundary values
17:35–17:55  Marcelina Mocanu  Quasiminimizers and quasiconformal maps in metric measure spaces
18:00–18:20  Mihaela Negrea  A simple proof of the theorem of Lebesgue of Riemann integrability of the vector functions of real variable
18:25–18:45 Florin Popovici A general Riemann-type integration theory including the Bochner integral

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

17:00–18:20 Chairman: Bogdan Nicolescu

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<td>Mihai Megan</td>
<td>Concepts of exponential expansiveness for linear skew-product semiflows</td>
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<td>17:20–17:40</td>
<td>Marian Gidea</td>
<td>Topological mechanism for Arnold diffusion</td>
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<td>17:40–18:00</td>
<td>Agnieszka Siluszyk</td>
<td>The existence of equilibrium positions of differential equations of many bodies asymmetric problem</td>
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<td>18:00–18:20</td>
<td>Miroslaw Jakubiak</td>
<td>Application of computer algebra in restricted problems of cosmic dynamics</td>
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Sections 8, 10 and 11: Probability, Mathematical Statistics, Computer Science, Mathematical Programming and Operation Research

17:00–18:00 Poster Session:

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<tr>
<td>Adriana Berechet</td>
<td>Ergodic behaviour of higher order derivatives of certain Perron-Frobenius operators</td>
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<td>Alina Constantinescu</td>
<td>Fuzzy partitions in data classification</td>
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<td>Liviu Dragomirescu</td>
<td>A new conception about numerical taxonomy applied in natural sciences</td>
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<tr>
<td>Elena-Nolica Druică</td>
<td>Unimodal functions and the comassability of the transition-matrix attached to EA</td>
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<td>Maria Miroiu</td>
<td>On the statistical models applied to image restoration</td>
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<td>Constantin Miroiu</td>
<td>A human detection system based on neural networks</td>
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<td>Romeo Negrea</td>
<td>On a global convergence of successive approximations for stochastic differential equations</td>
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<td>Eugenia Panaitescu</td>
<td>Algorithm for the generalized secvential Wald test</td>
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<td>Tiberiu Postelnicu</td>
<td>ML estimators in an epidemic model</td>
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<td>Romica Trandafir</td>
<td>Reliability of structural systems</td>
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<td>Emiliana Ursianu</td>
<td>Fractal sets applied to the diagnosis of malignant tumor</td>
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18:00–19:20 Chairman: Gheorghiţă Zbăganu
18:00–18:20  Costel Balcău  On maximum entropy distributions of nonnegative random variables with conditional-additive structure
18:20–18:40  Gheorghe Constantin  On a class of stochastic differential equations
18:40–19:00  Ion Mihoc  Effect of truncation on the exponential families of distributions
19:00–19:20  George Cristian Ureche  On some composite models

**Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics**

**17:00–19:00 Chairman: Enrique Sanchez-Palencia**

17:00–17:20  Ruxandra Stavre  Optimal control of nonstationary, three dimensional micropolar flows
17:20–17:40  Antonela Toma  The generalized equations in the distributions space $D'(R^2)$ of the transversal vibrations of the elastic rods with finite length and constant cross-section
17:40–18:00  Delia-Claudia Costea  TBA
18:00–18:20  Claudia Timothe  Homogenization results for Signorini’s type problem
18:20–18:40  Mircea Lupu  A constructive theory of optimization airfoils for streamline flows
18:40–19:00  Horia Dumitrescu  Flow prediction in a blower casing
Wednesday, June 25th, 2003

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

09:00–12:00 Chairman: Ștefan Papadima

09:00–09:45 Henri Moscovici  
Transverse Geometries and Modular Correspondences

10:00–10:45 Alexandru Suciu  
Systolic inequalities and Massey products

Coffee

11:15–12:00 Nicolae Manolache  
Multiple Structures

Sections 7 and 9: Functional Analysis, Operator Theory and Numerical Analysis

09:00–10:30 Chairman: Nicolae Popa

09:00–09:45 Lior Tzafriri  
TBA

10:00–10:30 Richard Fournier  
New results concerning an inequality of Bernstein

Coffee

11:15–12:15 Chairman: Șerban Strătilă

11:15–11:35 Luminița Vîță  
Set-set apartness and uniform spaces

11:35–11:55 Vasile Neagu  
On the regularization of singular integral operators

11:55–12:15 Elena Cristina Stamate  
Vector subdifferentials

Section 4: Real and Complex Analysis, Potential Theory

09:00–12:00 Chairman: Cabiria Andreian-Cazacu

09:00–09:45 Miodrag Mateljević  
Harmonic mappings, trajectory structure and related problems

10:00–10:45 Chung-Chun Yang  
Value distribution theory and its application to differential and functional equations
Coffee

11:15–12:00  Dorin Ghişa  Dianalytic dynamics and harmonic measure

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

09:00–10:50 Chairman: Vicenţiu Rădulescu

09:00–09:45  Daniel Tătaru  Nonlinear wave equations
10:00–10:30  Eugen Grebenikov  Integrability problem of hamiltonian differential equations
10:30–10:50  Vasile Glăvan  Shadowing in set-valued dynamics

Coffee

11:15–12:30 Chairman: Vasile Postolica

11:15–12:00  Ştefan Mirică  New concepts and results in the theory of differential games
12:00–12:30  Aurelian Cernea  Maximum principle, dynamic programming and their relationship under state constraints

Sections 8, 10 and 11: Probability, Mathematical Statistics, Computer Science, Mathematical Programming and Operation Research

09:00–10:30 Chairman: Ion Văduva

09:00–09:45  Luminiţa State  Applications of PCA in image compression
09:45–10:30  Ioan Tomescu  Almost all graphs and \(h\)-hypergraphs have small diameter

Coffee

11:00–12:50 Chairman: Ioan Tomescu

11:00–11:30  Ion Văduva  Simulation of some multivariate distributions
11:30–12:00  Tudor Bălănescu  Formal specification, formal verification
12:00–12:30  Florentin Ipate  Testing based on machine specification
12:30–12:50  Laurenţiu Modan  Some new aspects for random graphs
Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics

09:00–12:15 Chairman: Nicolae Cristescu

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<tr>
<td>09:00–09:45</td>
<td>Ioan Pop</td>
<td>Modelling industrial fluid mechanics and heat transfer problems</td>
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<tr>
<td>09:45–10:30</td>
<td>Veturia Chiroiu</td>
<td>The solitonic behaviour of some nonlinear wave equations</td>
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<tr>
<td>10:30–10:50</td>
<td>Mihai Popescu</td>
<td>Functional analysis method in optimizing orbital rendez-vous</td>
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Coffee

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<tr>
<td>11:15–11:35</td>
<td>Teodor Grosan</td>
<td>Conjugate heat transfer problems in porous media</td>
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<td>11:35–11:55</td>
<td>Gelu Paşă</td>
<td>Improvement of the Hele-Shaw instability</td>
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<td>11:55–12:15</td>
<td>Wilhelm Kecs</td>
<td>The study of the vibration’s equations of viscoelastic rods with differential type constitutive law</td>
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Lunch

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

14:30–17:20 Chairman: Şerban Basarab

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<td>Florian Pop</td>
<td>New perspectives in the birational anabelian geometry</td>
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<td>15:30–16:00</td>
<td>Cristian Cobeli</td>
<td>Pair Correlation distribution for the Farey sequence</td>
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<td>16:10–16:30</td>
<td>Mirela Ştefănescu</td>
<td>Homology of near-rings</td>
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Sections 7 and 9: Functional Analysis, Operator Theory and Numerical Analysis

14:30–16:30 Chairman: Ioan Rus

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<tr>
<td>14:30–15:00</td>
<td>Nicolae Dinculeanu</td>
<td>Stochastic integration in Banach spaces</td>
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<td>15:00–15:30</td>
<td>Gheorghe Micula</td>
<td>A variational approach to spline functions theory</td>
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<td>15:30–15:50</td>
<td>Ioan Raşa</td>
<td>Altomare projection and related objects</td>
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<td>15:50–16:10</td>
<td>Vasile Berinde</td>
<td>Error estimates and weak stability of point iteration procedures</td>
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</table>
16:10–16:30  Emil Cătinaș  The successive approximations and the Newton type iterations: connections, characterizing the convergence order in presence of perturbations

Section 4: Real and Complex Analysis, Potential Theory

14:45–16:30 Chairman: Adam Lecko

14:45–15:15  Elena Popoviciu  On the concept of allure
15:15–15:35  Ion Chițescu  Computational procedures for generating fractals
15:40–16:10  Piotr Dovbush  Extension properties of X-normal maps
16:10–16:30  Natalia Gashitsoi  Extension properties of B-normal maps

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

14:30–16:30 Chairman: Radu Purice

14:30–15:00  Dimitri Yafaev  High-energy and smoothness asymptotic expansion of the scattering amplitude
15:00–15:30  Gheorghe Nenciu  TBA
15:30–16:00  Marius Măntoiu  The Weil calculus in a magnetic field
16:00–16:30  Horia Cornean  Do bosons condense in a homogeneous magnetic field?

Sections 8, 10 and 11: Probability, Mathematical Statistics, Computer Science, Mathematical Programming and Operation Research

14:30–16:30 Chairman: Luminița State

14:30–14:50  Elena Boian  VPNP simulation of genes switching regulation process
14:50–15:10  Cocan Moise  A comparison between the Randic weight of a connected graph and the graph connection power
15:10–15:30  Cătălina-Lucia Co- 
cianu  A wavelet based approach in image restoration
15:30–15:50  Cristian Kevorchian  A q-analyze approach of membrane computing
15:50–16:10  Sorin Demetriu  Reliability-based structural optimization
16:10–16:30  Eugen Mandrescu  Are the independence polynomials of trees unimodal?
Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics

14:45–16:30 Chairman: Laurențiu Panaitopol

14:30–14:50  Răzvan Răducanu  Over the evolution of the fundamental ideas of fracture mechanics
14:50–15:10  George Purcaru  On the interaction of philosophy with mathematics: truth, laws and prediction
15:10–15:30  Andrei Vernescu  Some abilities in elementary mathematics
15:30–15:50  Olimpia Popescu  About the history of Mathematical Gazzette
15:50–16:10  Anghel Dafina  Contribuții asupra locurilor geometrice
16:10–16:30  Mihaela Singer  A constructivist perspective on curriculum development: How to foster understanding?

Coffee

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

17:00–17:20  Afrodita Iorgulescu  New generalizations of BL-algebras

17:20–19:00 Poster Session

Călin Agut  Submanifolds of contact metric manifolds
Nicoleta Aldea  TBA
Vladimir Balan  Lagrange structures associated to Sabba-Ștefănescu configurations
Temistocle Bârsan  Continuity of the spheres and convexity in the metric spaces
Dumitru Botnaru  Locally duality
Sergiu Cataranciuc  TBA
Vladimir Cebotari  A criterion of parametrical completeness in the 4-valued extension of model logic
Cristian Costinescu  On some special spectra
Radu Iordănescu  Jordan structures in differential geometry
Vladimir Izbas  Some applications of quasigroups
Alexandru Lungu  TBA
Adelina Manea  An invariance property of Mastrogiacomo cohomolgy group of a manifold
Adela Mihai  Slant submanifold of complex space forms
Gheorghe Murărescu  TBA
Ion Negru  On finite approximation by lattices
Andrei Pavelescu  TBA
Angela Păsărescu  The use of non-standard methods in algebra and complex analysis
Cornel Sebastian Pintea  Homotopy invariants of certain complements in a topologically critical point problem
Liviu Octavian Popescu  Integrability conditions for homogeneous geometric structures
Monica Purcaru  A remarkable structure and connections on the tangent bundle
Andrei Rusu  Functional investigations in provability theory
Adrian Sandovici  Time-dependent lagrangian geometry
Nicolae Sandu  The classification of simple Moufang loops
Ion Sciifos  On the ordering of the commutative A-loop
Vladimir Slesar  On the adiabatic limits of a riemannian foliation
Cătălin Sterbeti  About semi-riemannian Osserman manifolds
Alina Turcanu  The left and right products of two subcategories

Section 4: Real and Complex Analysis, Potential Theory

17:00–19:00 Chairman: Gheorghe Bucur

17:00–17:30 Petru Caraman  Capacities and moduli in abstract Wiener spaces
17:30–18:00 Mihai Cristea  A change of variable formula for quasidifferentiable maps
18:00–18:20 Cabiria Andreian-Cazacu  BMO-mappins in the plane
18:20–18:40 Monica Roșiu  N-quadratic differentials of finite norm on a Klein surface
18:40–19:00 Sorina Bârză  On some spaces of infinite matrices
18:40–19:00 Emilian Costache  On cluster sets

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

17:00–18:30 Chairman: Radu Purice

16:30–17:00 Cătălin Ciupală  Linear connections on almost commutative graded Lie–Cartan pair

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17:30–18:00 Nicolae Cotfas  Raising and lowering operators in the theory of hypergeometric type equations
18:00–18:30 Olivian Simionescu  Wave propagation in solid media subject to initial electromechanical fields

Sections 8, 10 and 11: Probability, Mathematical Statistics, Computer Science, Mathematical Programming and Operation Research

17:00–18:20 Chairman: Luminița State

17:00–17:20 Douglas S. Bridges  Apartness spaces and constructive topology
17:20–17:40 Adriana Popovici  Linear cellular automata
17:40–18:00 Gabriel Ciobanu  Mobile ambients, the pi-calculus and their relationships
18:00–18:20 Aurelia Profir  VPNP simulation of genes switching regulation process, Mathematical models of genes switching

Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics

17:00–18:20 Chairman: Laurențiu Panaitopol

17:00–17:20 Solomon Marcus  To prove or not to prove, that is the question!
17:20–17:40 Norbert Schloimiuk  André Weil and the history of mathematics
17:40–18:00 George Purcaru  On the interaction of philosophy with mathematics: truth, laws and prediction
18:00–18:20 Vasile Berinde  Romania’s attendance at ICME-10, Copenhagen

Thursday, June 26th, 2003

Excursion

Reception at Cotroceni Palace
Friday, June 27th, 2003

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

09:00–12:00 Chairman: Barbu Berceanu

09:00–09:45 Alexandru Zaharescu  Distribution of zeroes of L-functions
10:00–10:45 Cristian Popescu  1-Motives, Etale Cohomology and Equivariant Iwasawa Theory

Coffee

11:15–12:00 Paltin Ionescu  Birational geometry of manifolds containing quasi-lines

Sections 7 and 9: Functional Analysis, Operator Theory and Numerical Analysis

09:00–10:40 Chairman: Gheorghe Micula

09:00–09:20 Costică Mustaţă  Extension and approximation of semi-Lipschitz real functions
09:20–09:40 Maria Crăciun  Applications of the umbral calculus in approximation theory
09:40–10:00 Călin Gheorghiu  A stabilized Chebyshev-spectral approach for a class of nonlinear Orr-Sommerfeld eigenvalue problem
10:00–10:20 Maria Mihoc  Canonical forms of the equation with four and five variables
10:20–10:40 Gheorghe Coman  Extension of Shepard interpolation

Coffee

11:15–12:35 Chairman: Constantin Niculescu

11:15–11:35 Alexandru Mitrea  On the unbounded divergence of some quadrature formulas
11:35–11:55 Ivan Secrieru  Les valeurs propres extremales a la stabilité des méthodes numeriques
11:55–12:15 Andrei Vernescu  About the use of the umbral calculus of approximation operators
12:15–12:35 Radu Pâltănea  Estimates with second order moduli of continuity
Section 4: Real and Complex Analysis, Potential Theory

09:00–12:00 Chairman: Petru Caraman

09:00–09:20 Petru T. Mocanu New applications of differential subordinations and superordinations
09:25–09:55 Grigore Sălăgean Analytic functions with negative coefficients
10:00–10:45 Gabriela Kohr Loewner chains in several complex variables, Applications

Coffee

11:15–12:00 Armen Jerbashian Weighted spaces of regular functions associated with fractional integro-differentiation

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

09:00–10:50 Chairman: Eugen Grebenikov

09:00–09:45 Sergiu Klainerman The problem of evolution in General Relativity
09:50–10:20 Adelina Georgescu Bifurcation and dynamic in some concrete systems from biology, medicine and economics
10:20–10:50 Andrei Perjan Singularly perturbed problems of hyperbolic-parabolic type

Coffee

11:15–12:15 Chairman: Adelina Georgescu

11:15–11:45 Nicolae Vulpe Planar cubic polynomial differential systems with the maximum number of invariant straight lines
11:45–12:15 Bogdan Nicolescu On the solutions for the Reynolds equation

Sections 8, 10 and 11: Probability, Mathematical Statistics, Computer Science, Mathematical Programming and Operation Research

09:00–10:30 Chairman: Anton Ştefănescu
09:00–09:45  George Haiman  Distribution of the partial maximum sequence of the tend map process
09:45–10:30  Irinel Drăgan  The computation and the inverse problem for the least square values

Coffee

11:15–12:45 Chairman: Irinel Drăgan
11:15–11:45  Constantin Corduneanu  Remembering some Romanian Mathematicians who have lived abroad
11:45–12:05  Valeriu Ungureanu  Strategic and Extensive games on Networks
12:05–12:25  Anton Ștefănescu  On the implementation of voting operators
12:25–12:45  Sorina Gramatovici  On duality for a class of nondifferentiable multiobjective variational problems

Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics

09:00–10:15 Poster Session

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<td>A Preisach model of the hysteretic behaviour of rocks</td>
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<td>Valeriu Panaitescu</td>
<td>An exact solution of Orr-Sommerfeld equation; stability analysis of plan poiseutle flow</td>
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<td>Closed analytic formulas for the approximation of the Legendre complete elliptic integrals of the first and second kinds</td>
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<td>Marian Șuran</td>
<td>Vertex deviation in our neighbourhood in the Galaxy</td>
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Marian Şuran  Tensorial approach of the large scale structure of the Universe

10:15–13:00 Chairman: Cristian Făciu

10:15–10:35 Mircea Bîrsan  Saint-Venant’s problem for Cosserat shells
10:35–10:55 Lori Badea  On a Schwartz multigrid method for the constraint minimization of non-quadratic functionals

Coffee

11:15–12:00 Magda Stavinschi  The Manev-type problems under qualitative attack
12:00–12:20 Leszek Gadowski  Hill’s surfaces in the generalized problem of many bodies
12:20–12:40 Ferenc Szenkovitz  Possible Capture of Near Earth Objects
12:40–13:00 Eugen Grebenkov  The Lyapunov stability of equilibrium positions of cosmic dynamics problems

Lunch

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

14:30–16:30 Chairman: Nicolae Manolache

14:30-15:15 Viorel Vâjâitu  A Levi problem involving q-subpluriharmonic functions
15:25-15:55 Petru Soltan  A fixed element of abstract multidimensional varieties and their application in the tectonic mobilism
16:00–16:30 Marian Vâjâitu  Some remarks about Krasner analytic functions

Sections 7 and 9: Functional Analysis, Operator Theory and Numerical Analysis

14:30–15:15 Chairman: Gheorghe Bucur

14:30–15:15 Florian Vasilescu  Analysis on semialgebraic sets

15:15–16:30 Poster Session

Octavian Agratini  Iterates of some bivariate linear approximation processes via weakly Picard operators
Petre Iliaş  Resonance problem for the p-Laplacean

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Maria Joița  Triviality theorems for Hilbert modules over locally C*-algebras
Luminița Lemnete-Ninulescu  On a generalization of a classical complex moment problem
Anca Nicoleta Marcoci  Remarks about a new Banach space of infinite matrices
Carmen Pârvulescu  An interpolation property of some operator ideal
Gheorghe Picol  An analysis of accuracy and effectiveness of computed solutions from methods for solving linear systems
George Popescu  Noncommutative inequalities in operator algebras
Anton Soloi  Methods for solving nonlinear systems of equations
Ligia Adriana Sporis  On some approximation properties in locally convex cones
Florică Voicu  On fixed point for mapping in complete vector lattices

Section 4: Real and Complex Analysis, Potential Theory

14:30–16:30 Chairman: Anatoly Golberg

14:30–15:00  Teodor Bulboaca  A general class of class subordination and superordination-preserving
15:00–15:20  Gheorghe Oros  On a second-order nonlinear differential subordination
15:30–15:50  Nicolae N. Pascu  Univalent functions in non-convex domains or in the half-upper plane
15:50–16:10  Veronica Nechita  Differential Superordinations in Several Complex Variables
16:10–16:30  Dorina Răducanu  On some univalence conditions for analytic functions in the unit disk

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

14:30–16:30 Chairman: Nicolae Jitărașu

14:30–14:50  Nicolaie Lungu  On Gronwall - Wendorf - type inequalities
14:50–15:10  Mihai Popescu  Optimal control for affine non-linear system with a nilpotent structure
15:10–15:30  Radu Burlacu  Mathematical models of applied biology of some metabolic processes
15:30–15:50  Octavian Grigore  A fault detection and localization of an helicopter execution element
15:50–16:10 Narcisa Apreutesei On the continuous dependence on data for a class of evolution equations
16:10–16:30 Gabriel Dimitriu Variational methods, optimal control and optimization

Sections 12, 13 and 15: Mechanics, Applied Mathematics and History of Mathematics

14:30–16:30 Chairman: Gheorghe Barbu

14:30–14:50 Paul-Marian Pisteai Asupra legilor fizicii și modelelor universului
14:50–15:10 George Purcaru The forecast of the next large earthquake in Vrancea(Romania): model, physical basis, and complexity of earthquake occurrence
15:10–15:30 Mihaela Sterpu Equivalent forms of the Fitzhugh-Nagumo model and their bifurcations
15:30–15:50 Dumitru Tkacenko The DEA-type model in the study of economical efficiency indexes
15:50–16:10 Nicolae Todor On the classification in oncology studies
16:10–16:30 Laura Ungureanu Economic cycles emphasis to degenerated Hopf bifurcation in a model of economic dynamics

Coffee

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

17:00–18:20 Chairman: Paltin Ionescu

17:00–17:20 Petre Stavre The parallelism in differential geometry and the Cauchy theorem
17:20–17:40 Brigitte Breckner Compactifications of subsemigroups of Lie groups
17:40–18:00 Vasile Ursu Amplification of a Birkhoff theorem in quasi-variety theory
18:00–18:20 Sever Angel Popescu Continuous functions on absolute Galois groups

Section 4: Real and Complex Analysis, Potential Theory

17:00–19:00 Chairman: Miodrag Mateljevici

17:00–17:30 Liviu Constantin Florescu Compactivity in Young measure spaces
18:00–18:20  Mihai Pascu  Maximum principle for the mixed Dirichlet-Neumann eigenvalue problem
18:20–18:40  Silvia Corduneanu  A class of means with parameters
18:40–19:00  Anca Croitoru  Set-valued integration in seminorm

Sections 5, 6 and 14: Ordinary and Partial Differential Equations, Variational Methods, Optimal Control and Mathematical Physics

17:00–17:40  Chairman: Petru Jebelean

17:00–17:20  Pavel Matei  An eigenvalue problem for a class of nonlinear elliptic operators in Orlicz - Sobolev spaces
17:20–17:40  Nicolae Pop  On the convergence of the Uzawa type algorithm for solving contact problems with friction in dual mixed variational formulation

20:00 CONGRESS DINNER
Saturday, June 28th, 2003

Sections 1, 2 and 3: Algebra, Algebraic, Complex and Differential Geometry and Topology

09:00–12:30 Chairman: Alexandru Suciu

09:30–10:00 Eugen Mihăilescu Complex dynamics and applications of ergodic theory in complex analysis
10:15–10:45 Adrian Constantinescu Grafts and desingularization

Coffee

11:15–11:45 Ovidiu Păsărescu On the classification of projective curves
11:50–12:10 Andrei Baran An abstract version of the Grauert’s direct image theorem
12:10–12:30 Yuri Zelinski Mappings with fixed degree on the boundary

Section 4: Real and Complex Analysis, Potential Theory

09:00–13:00 Chairman: Grigore Sălăgean

09:00–09:45 Arturo Fernandez Arias On the unintegrated fundamental inequality of Nevanlinna
10:00–10:45 Anatoly Golberg Generalized classes of quasiconformal and quasiisometric mappings

Coffee

11:15–12:00 Florin Rădulescu The noncommutative moment problem
12:00–12:20 Valeriu Anisiu $p$-subdifferentiability and generic differentiability of convex functions
12:20–12:40 Alina Cristiana Gavriliuț TBA
12:40–13:00 Constantin Niculescu The wonderful world of convexity