

Section 4: Functional Analysis, Operator Theory and Numerical Analysis

Friday, June 29th, 2007

09:00–10:45 Chairman: **Petru Cojuhari**

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| 09:00–09:45 | Alexander Ya. Helemskii | Semi-Ruan one-sided modules, the extreme flatness and the Arveson-Wittstock Theorem |
| 10:00–10:45 | George Isac | Quasi-boundedness, fixed-points, eigenvalues for nonlinear mappings and complementary problems |

C o f f e e

11:15–13:00 Chairman: **George Isac**

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| 11:15–12:00 | Ioan A. Rus | Special fixed point structures |
| 12:15–13:00 | Ismat Beg | Strong convergence theorems for common fixed points of Banach operator pair |

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15:30–17:45 Chairman: **Ioan A. Rus**

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| 15:30–16:15 | Lori Badea | Additive and multiplicative Schwarz methods for inequalities with contraction operators |
| 16:45–17:15 | Nicolae Dăneț | Some applications of interval analysis in functional analysis |
| 17:15–17:45 | George Kostopoulos | General algorithm for the development of detailed algorithms for the extraction of integer roots |

17:50–19:35 Chairman: **Călin Ambrozie**

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| 17:50–18:20 | Florentina Tone | Long-time stability of the implicit Euler scheme for the 2d Navier-Stokes equations |
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18:20–18:50	Adrian Diaconu	On the approximation of equations' solutions through methods that use divided differences
18:55–19:15	Ivan Secrieru	The spectral properties of operators in approximate schemes
19:15–19:35	Marius Apetrii	A dual generalization of monotone mapping

Saturday, June 30th, 2007

09:00–10:45 Chairman: **Aurelian Gheondea**

09:00–09:45	Călin Ioan Gheorghiu	Spectral methods for non-standard eigenvalue problems
10:00–10:45	Petru Cojuhari	Spectral analysis of some perturbed block Toeplitz operators

C o f f e e

11:15–13:00 Chairman: **Alexander Ya. Helemskii**

11:15–12:00	Dan Pascali	On semilinear spectral theory
12:15–13:00	Nicolae Suci	Analytic functions of ρ -contractions

L u n c h

15:30–17:45 Chairman: **Mihai Şabac**

15:30–16:15	Dumitru Gaşpar	Abstract reproducing kernel structures and general dilation results
16:45–17:15	Pastorel Gaşpar	On gramian (co)-isometric extensions
17:15–17:45	Aurelian Crăciunescu	Factorization properties of ρ -contractions

17:50–19:55 Chairman: **Dumitru Gaşpar**

17:50–18:20	Dan Popovici	On the structure of γ contractions
18:20–18:50	Laurian Suci	Classes of operators similar to partial isometries and generalized inverses
18:55–19:15	Adina Juratoni	P-spectral and semispectral representations of function algebras
19:15–19:35	Sorin Nădăban	Representations of quotient Hilbert spaces
19:35–19:55	Flavius Pater	A representation theorem for $*$ -semigroups

Monday, July 2nd, 2007

09:00–10:45 Chairman: Viorel Nițică

- 09:00–09:45 **Marius Dardalat** Bundles, operator algebras and K-theory
10:00–10:45 **Florin Rădulescu** Quantum dynamics in the von Neumann algebras associated with some discrete groups

Coffee

11:15–13:00 Chairman: Marius Dardalat

- 11:15–12:00 **Bebe Prunaru** Toeplitz operators associated to commuting row contractions
12:15–13:00 **Maria Fragouloupoulou** Construction of unbounded $*$ -representations in terms of "unbounded" C^* -seminorms

Lunch

15:30–17:45 Chairman: Călin Ioan Gheorghiu

- 15:30–16:15 **Liliana Pavel** On the center of compact hypergroup algebras
16:45–17:15 **Mihai Popa** On c -free probability with amalgamation
17:15–17:45 **Maria Joița** Extremal completely n -positive linear maps between C^* -algebras

17:50–19:35 Chairman: Nicolae Suciu

- 17:50–18:20 **Ilie Valușescu** On periodically correlated processes in complete correlated actions
18:20–18:50 **Radu Păltănea** Asymptotic expansion for Durrmeyer operators in complex domains
18:55–19:15 **Elena Pelican** The bivariate log-skew-normal distribution. Numerical aspects
19:15–19:35 **Cezar Lupu** Some remarks on an elementary inequality equivalent to Riemann hypothesis
19:35–19:55 **Valeriu Anisiu** Porosity in Banach spaces

Tuesday, July 3rd, 2007

09:00–10:45 Chairman: **Dan Timotin**

- 09:00–09:45 **Florian-Horia Vasilescu** Unbounded subnormal operators
- 10:00–10:45 **Aurelian Gheondea** When are products of two normal operators normal?

Coffee

11:15–13:00 Chairman: **Camil Muscalu**

- 11:15–12:00 **Călin Ambrozie** A result on positive matrix completions
- 12:15–13:00 **Dan Timotin** The eigenvalues of a sum of selfadjoint operators

Lunch

15:30–17:45 Chairman: **Florian-Horia Vasilescu**

- 15:30–16:15 **Octav Olteanu** Some unexpected problems of Moment Problem
- 16:45–17:15 **Luminița Lemnete** Moment problems
- 17:15–17:45 **Dana Bereanu** Some perturbation results for quotient morphisms

17:50–19:35 Chairman: **Ismat Beg**

- 17:50–18:20 **Cristina Cismasiu** A quantitative estimation of an asymptotic representation for linear positive operators
- 18:20–18:50 **Carmen Pârvulescu** On a property of quasicompact operators
- 18:55–19:15 **Ligia Adriana Sporiș** On some extension and separations results in locally convex cones
- 19:15–19:35 **Cristina Stamate** Duality for vector optimization problems

Wednesday, July 4th, 2007

09:00–10:45 Chairman: **Nicolae Popa**

- 09:00–09:45 **Camil Muscalu** Calderon commutators and the Cauchy integral on Lipschitz curves, revisited

10:00–10:45 **Viorel Nițică** Rigidity of higher rank abelian cocycles with values in diffeomorphism groups

Coffee

11:15–13:00 Chairman: **Florin Rădulescu**

11:15–12:00 **Andrei Török** Stability of mixing and rapid mixing for hyperbolic flows

12:15–13:00 **Mihai Șabac** Commuting systems of bounded operators, factorization, and spectral correspondence

Lunch

15:30–17:45 Chairman: **Liliana Pavel**

15:30–16:15 **Nicolae Popa** Schur multipliers between Banach spaces of matrices

16:45–17:15 **Liviu Marcoci** A class of unbounded operators and Schur multipliers for them

17:15–17:45 **Olga Martin** Splitting numerical method for the solution of one-dimensional transport equation

17:50–19:35 Chairman: **Andrei Török**

17:50–18:20 **Lemnaouar Zedam** A fuzzy version of Hahn-Banach theorem

18:20–18:50 **Rodica-Mihaela Dăneț** Fixed -point theorems for some families of multimaps

18:55–19:15 **Andrei Vernescu** On some new results in the summation of numerical series