# PROGRAM

Workshop on Matrices & Operators, with Abraham Berman June 3-4, 2014 Department of Mathematics University of Coimbra Portugal

Sponsored by:

Compete (Programa operacional factores de competitividade) CMUC - Centre for Mathematics, University of Coimbra CELC – Centro de Estruturas Lineares e Combinatórias, University of Lisbon Department of Mathematics, University of Coimbra

# Tuesday - June 3, 2014

#### **Room 2.4**

09.30 - 10.00	Registration
10.00 - 10.15	Opening Ceremony
Chair: Natália Bebia 10.15 –11.00	no <i>Completely Positive Matrices and Optimization</i> <b>Abraham Berman</b> , Technion - Israel Institute of Technology, Israel
11.00 - 11.30	Coffee Break
Chair: Alexander Ko	vačec
11.30 - 12.00	Star sets, star complements and graphs with convex-qp stability number Domingos Cardoso, University of Aveiro, Portugal
12.00- 12.30	Upper bounds on the magnitude of solutions of certain linear systems <b>Pedro Freitas</b> , University of Lisbon, Portugal
12.30 - 14.30	Lunch
Chair: Domingos Ca	rdoso
14.30 - 15.00	Infimum of two projections Celeste Gouveia, University of Coimbra, Portugal
15.00 - 15.30	Lexicographical combinatorial generation and Gray codes for noncrossing and nonnesting set partitions of types A and B <b>Ricardo Mamede</b> , University of Coimbra, Portugal
15.30 - 16.00	An extension of a Fiedler's lemma and its application on graph energy <b>Enide Martins</b> , University of Aveiro, Portugal
16.00 - 16.30	Coffee Break
Chair: Rute Lemos	
16.30 - 17.00	<i>Coupled cell networks: mixing digraphs, matrices and dynamics</i> <b>Célia Moreira</b> , University of Porto, Portugal
17.00 - 17.30	Independent sets for irreducible characters of $S_n$
	Carlos Gamas, University of Coimbra, Portugal
17.30 – 18.00	<i>Higher order derivatives and norms of certain matrix functions</i> <b>Sónia Carvalho</b> , University of Lisbon, Portugal
19.30	Conference Dinner

### Wednesday - June 4, 2014

### Room 2.4

Chair: Susana Furtado	
09.30 - 10.00	Orthogonal polynomials, tridiagonal matrices, and spectral theory of Jacobi
	operators José Carlos Petronilho, University of Coimbra, Portugal
10.00 - 10.30	
10.00 - 10.30	Sets of Parter Vertices which are Parter Sets Henrique F. da Cruz, University of Beira Interior, Portugal
10.30 - 11.00	On Milne and Ostrowski Inequalities of Aczél type
	Rute Lemos, University of Aveiro, Portugal
11.00 - 11.30	Coffee Break
Chair: Ana Nata	
11.30 - 12.00	The group inverse of a $2 \times 2$ block matrix
	Pedro Patrício, University of Minho, Portugal
12.00-12.30	Block-symmetric Fiedler pencils with repetition and strong linearizations
	of matrix polynomials
	Susana Furtado, University of Porto, Portugal
12.30 - 14.30	Lunch
Chair: Graça Soares	
14.30 - 15.00	2 by 2 matrices and formal degree for L-parameters of $\mathit{SL}_2$ over a local
	function field
	Sérgio Mendes, ISCTE-IUL, Portugal
15.00 - 15.30	Zero in the closure of the numerical range
	Cristina Diogo, Instituto Universitário de Lisboa, Portugal
15.30 - 16.00	One sided invertibility of matrices and Toeplitz operators
	M. Cristina Câmara, University of Lisbon, Portugal
16.00 - 16.30	Coffee Break
Chair: Celeste Gouveia	
16.30 - 17.00	Numerical ranges and compressions
	Ana Nata, Polytechnic Institute of Tomar, Portugal
17:00 - 17.30	On the inverse field of values problem
	Natália Bebiano, University of Coimbra, Portugal
17.30 - 18.00	<i>The 123 theorem of probability theory and copositive matrices</i> <b>Alexander Kovačec</b> , University of Coimbra, Portugal
18.00 - 18.20	Closing Ceremony