

THURSDAY, June 15. Morning

MSI01. Combinatorial matrices.

11:10-11:40: **AULA SEMINARIOS**. Rigid spectra

- a surprising consequence of invertible subtrees. Seth Meyer.

11:40-12:10: **AULA SEMINARIOS**. New

results on graph partition and Fiedler theory. Enide Andrade.

12:10-12:40: **AULA SEMINARIOS**. Integer eigenvalues of n-Queens graph. Inês Serôdio Costa.

12:40-13:10: **AULA SEMINARIOS**. Approximate Graph Colouring and Crystals. Lorenzo Ciardo.

MSI02. Low-rank matrices and tensors: algorithms and applications.

11:10-11:40: **AULA 10**. Submatrices with the

best-bounded inverses: revisiting the hypothesis. Yuri Nesterenko.

11:40-12:10: **AULA 10**. Superfast iterative

refinement of Low Rank Approximation of a Matrix. Victor Pan.

12:10-12:40: **AULA 10**. Adaptive Undersampling in Spectromicroscopy. Oliver Townsend.

12:40-13:10: **AULA 10**. A Nyström-like randomized

algorithm for low-rank approximation of tensors. Alberto Bucci.

MSI05. Realization formulas, rational inner functions, and real algebraic geometry.

11:10-11:40: **AULA 5**. Ranks of linear matrix

pencils separate simultaneous similarity orbits. Igor Klep.

11:40-12:10: **AULA 5**. Clark measures associated with RIFs. Linus Bergqvist.

12:10-12:40: **AULA 5**. Facial structure of matrix convex sets. Tea Strelkelj.

12:40-13:10: **AULA 5**. Free Extreme points of free

spectrahedra and generalized free spectrahedra. Eric Evert.

MSC04. Green's function on networks and its applications.

11:10-11:40: **AULA 3**. Recovering piecewise

constant conductances on networks with boundary. Álvaro Samperio.

11:40-12:10: **AULA 3**. A Riesz Decomposition

Theorem for Schrödinger Operators on Graphs. Florian Fischer.

12:10-12:40: **AULA 3**. Group Inverse

and equilibrium measure on Random Walks. Álvar Martín-Llopi.

MSC08. In honour of Steve Kirkland's 60th Birthday.

11:10-11:40: **SALÓN DE ACTOS**. Extremal Singular Graphs and Nut Graphs. Irene Sciriha.

11:40-12:10: **SALÓN DE ACTOS**. Limit points of Laplacian spectral radii of graphs. Vilmar Trevisan.

12:10-12:40: **SALÓN DE ACTOS**. Smallest positive eigenvalue of graphs. Sasmita Barik.

12:40-13:10: **SALÓN DE ACTOS**. Some bounds for the energy of complex unit gain graphs. Rajesh Kannan.

MSC09. Polynomial and rational matrices and applications.

11:10-11:40: **AULA 16**. Linearization of meromorphic matrix-valued functions. Rafikul Alam.

11:40-12:10: **AULA 16**. Rational approximation and linearisation for nonlinear eigenvalue problems and nonlinear systems. Karl Meerbergen.

12:10-12:40: **AULA 16**. Computing zeros of rational functions and matrices. María C. Quintana.

12:40-13:10: **AULA 16**. Randomized sketching of nonlinear eigenvalue problems. Daniel Kressner.

MSC11. Eigenvalue applications and optimization in numerical linear algebra.

11:10-11:40: **AULA 7**. Root-Max Problems, Hybrid Expansion-Contraction, and Optimization of Passive Systems. Tim Mitchell.

11:40-12:10: **AULA 7**. Locating Eigenvalues of Quadratic Matrix Polynomials. Shreemayee Bora.

12:10-12:40: **AULA 7**. Large-Scale Minimization of the Pseudospectral Abcissa. Emre Mengi.

12:40-13:10: **AULA 7**. Optimal Rational Matrix Function Approximation Using the Arnoldi Algorithm. Anne Greenbaum.

MSC13. Linear algebra and quantum information theory.

11:10-11:40: **AULA 6F**. Entangled subspaces and their characterization. Remigiusz Augusiak.

11:40-12:10: **AULA 6F**. A complete hierarchy of linear systems for certifying quantum entanglement of subspaces. Benjamin Lovitz.

12:10-12:40: **AULA 6F**. Refuting spectral compatibility of quantum marginals. Felix Huber.

12:40-13:10: **AULA 6F**. Mutually unbiased measurements and their applications in quantum information. Máté Farkas.

MSC16. Orthogonal polynomials, matrix analysis and applications.

11:10–11:40: **AULA 15**. Bernstein–Szegő measures in the plane. Jeffrey Geronimo.

11:40–12:10: **AULA 15**. Time–and–band limiting for exceptional orthogonal polynomials. Mirta M. Castro Smirnova.

12:10–12:40: **AULA 15**. On generating Sobolev orthogonal polynomials. Niel van Buggenhout.

MSC24. Representations of groups and algebras and related topics.

11:10–11:40: **AULA 6**. Blocks of endomorphism algebras via quasi–hereditary algebras. Stephen Donkin.

11:40–12:10: **AULA 6**. Exact Borel subalgebras of stratified algebras. Teresa Conde.

12:10–12:40: **AULA 6**. Compression of bounded complexes and Auslander–Reiten sequences. María José Souto Salorio.

12:40–13:10: **AULA 6**. Shintani descent for supercharacters of finite algebra groups. Carlos André.

Updated: 06 June 2023