

TUESDAY, June 13. Afternoon

MSC02. New faces of spectral graph theory.

17:00–17:30: **AULA SEMINARIOS**. Semidefinite and eigenvalue bounds for bicliques and biindependent sets. Luis Felipe Vargas.

17:30–18:00: **AULA SEMINARIOS**. Probing the Structure of Graph Nullspaces with Zero Loci. Joshua Cooper.

18:00–18:30: **AULA SEMINARIOS**. Clique complexes of strongly regular graphs and their eigenvalues. Sebastian M. Cioaba.

MSC05. Bounded rank perturbations in matrix theory and related problems.

17:00–17:30: **AULA 16**. Generic skew-symmetric matrix polynomials with bounded rank and fixed even grade. Andrii Dmytryshyn.

17:30–18:00: **AULA 16**. Generic Hermitian matrix pencils with bounded rank. Fernando De Terán.

18:00–18:30: **AULA 16**. An interlacing result for Hermitian matrices in Minkowski space. Madeleine van Straaten.

18:30–19:00: **AULA 16**. Spectral enclosures and resolvent estimates for matrix and operator polynomials. Christiane Tretter.

MSC06. Matrix and operator means.

17:00–17:30: **AULA 11**. Approximation results for generalized operator means. Miklós Pálfia.

17:30–18:00: **AULA 11**. Regression on the manifold of fixed rank positive semidefinite matrices. Hosoo Lee.

18:00–18:30: **AULA 11**. Matrix Means on Grassmann Manifolds. Tin-Yau Tam.

MSC07. The interplay between linear-multilinear algebra and rational approximation.

17:00–17:30: **AULA 6**. Rational extrapolation methods, Anderson acceleration, and solution of systems of equations. Claude Brezinski.

17:30–18:00: **AULA 6**. On generalized inverse of a vector, with applications to vector epsilon algorithm. Ahmed Salam.

18:00–18:30: **AULA 6**. Computing the generalized rational minimax approximation. Nir Sharon.

18:30–19:00: **AULA 6**. Perfect shifts for Hessenberg-Hessenberg pencils. Marc Van Barel.

19:00–19:30: **AULA 6**. A Rational Preconditioner for Multi-dimensional Riesz Fractional Diffusion Equations. Mariarosa Mazza.

MSC17. Pattern restricted inverse eigenvalue problems.

17:00–17:30: **AULA 12**. Minimum rank bounds for cobipartite graphs and zero-nonzero patterns. Louis Deaett.

17:30–18:00: **AULA 12**. The difficulty of minimum rank 3. Alatheia Jensen.

18:00–18:30: **AULA 12**. Generic realisability and applications. Rupert Levene.

18:30–19:00: **AULA 12**. The number of distinct eigenvalues of joins of graphs. Mark Kempton.

MSC19. Totally positive matrices.

17:00–17:30: **AULA 7**. Accurate eigenvalues of some generalized sign regular matrices via relatively robust representations. Rong Huang.

17:30–18:00: **AULA 7**. Bidiagonal decompositions of singular sign regular matrices of signature $(1, \dots, 1, -1)$. Plamen Koev.

18:00–18:30: **AULA 7**. Tropical totally positive matrices. Adi Niv.

18:30–19:00: **AULA 7**. Linear Algebra in Approximation Theory: a new hope. José-Javier Martínez.

MSC20. Euclidean Jordan algebras and related systems.

17:00–17:30: **AULA 5**. Fan–Theobald–von Neumann systems. Muddappa Gowda.

17:30–18:00: **AULA 5**. A Fiedler–type determinantal inequality in Euclidean Jordan algebras. David Sossa.

18:00–18:30: **AULA 5**. Jordan automorphisms and derivatives of symmetric cones. Michael Orlitzky.

18:30–19:00: **AULA 5**. On certain properties of the second order cone and some of its generalizations. Roman Sznajder.

19:00–19:30: **AULA 5**. Hadamard product and related inequalities in the Jordan spin algebra. Juyoung Jeong.

MSC22. State-of-the-art in algorithms and applications.

- 17:00-17:30: **AULA 10**. A Low-complexity Algorithm in Navigating Unmanned Aerial Systems. Sirani M. Perera.
- 17:30-18:00: **AULA 10**. A Vandermonde Neural Operator: Extending the Fourier Neural Operator to Nonequispaced Distributions. Levi Lingsch.
- 18:00-18:30: **AULA 10**. Computing Approximate Solutions of Ill-Conditioned Linear Systems in Low and Mixed Precision. James Nagy.
- 18:30-19:00: **AULA 10**. Solving an inverse eigenvalue problem using a divide-and-conquer method. Natalia Bebiano.

MSC23. Tensors and quantum information.

- 17:00-17:30: **AULA 6F**. Apolarity for border rank and applications. Jaroslaw Buczynski.
- 17:30-18:00: **AULA 6F**. On the complexity of finding tensor ranks. Mohsen Aliabadi.
- 18:00-18:30: **AULA 6F**. Tensor optimal transport. Shmuel Friedland.
- 18:30-19:00: **AULA 6F**. Entropic characterization of the spectral radius of nonnegative tensors and beyond. Stéphane Gaubert.

MSC26. Bohemian matrices and related topics in matrix theory.

- 17:00-17:30: **AULA 15**. On Eigenvalue Gaps of Integer Matrices. Jamie Pommersheim.
- 17:30-18:00: **AULA 15**. On the orthogonal decomposition of real square matrices over the co-Latin and semi-magic symmetry classes. Matthew Lettington.
- 18:00-18:30: **AULA 15**. Inner Bohemian matrices. Juana Sendra.
- 18:30-19:00: **AULA 15**. Computing the maximum spread of a Bohemian symmetric matrix with entries in $[a, b]$. Rafael Sendra.
- 19:00-19:30: **AULA 15**. On the the eigenvalues of (Bohemian) Q-matrices and P-matrices. Laureano González-Vega.