

# ILAS2023: Program at a glance (contributed talks)

	Monday	Tuesday	Wednesday	Thursday
15:00-15:30	AULA 3. Spectral geometric mean, geometric mean, and Kantorovich constant. <b>Shigeru Furuichi.</b>	AULA 3. Linear dynamical systems for constructing observable convolutional codes with good decodable properties. <b>Noemí De Castro-García.</b>	AULA 3. Parallel-in-time solver for the all-at-once Runge-Kutta discretization. <b>Ángeles Martínez Calomardo.</b>	
15:00-15:30	AULA 5. Factorization of completely positive matrices by alternating minimization. <b>Harry Oviedo.</b>	AULA 5. Matrix Nearness Problems with Rank-Structured Positive Definite Matrices. <b>Luijing Chen.</b>	AULA 5. Dispersion Entropy for Graph Signals. <b>John Stewart Fabila Carrasco.</b>	AULA 5. Fast multiplication, determinants, inverses and eigendecompositions of arrowhead and diagonal-plus-rank-one matrices over associative fields. <b>Nevena Jakovčević Stor.</b>
15:00-15:30	AULA 6. Optimized Higher Order Dynamic Mode Decomposition Analysis of Electrocardiography Datasets. <b>Andrés Bell.</b>	AULA 6. Problems related to data analysis in non-Euclidean spaces: iterative filtering for signals defined on the sphere. <b>Roberto Cavassi.</b>		
15:00-15:30	AULA 7. The inverse Horn problem. <b>João Queiró.</b>	AULA 7. Combined matrices of diagonally equipotent matrices. <b>Rafael Bru.</b>	AULA 7. Sequences of lower and upper bounds for the spectral radius of a nonnegative matrix and applications. <b>Aikaterini Aretaki.</b>	AULA 7. On almost semimonotone matrices and the linear complementarity problem. <b>Bharat Pratap Chauhan.</b>
15:00-15:30	AULA 10. Bi-Additive models and Symmetry. <b>Sandra Ferreira.</b>	AULA 10. CP decomposition and low-rank approximation of antisymmetric tensors. <b>Erna Begovic.</b>	AULA 10. The Varchenko Determinant for Complexes of Oriented Matroids. <b>Sophia Keip.</b>	AULA 10. Stopping criteria for the coarsest-grid solver in multigrid V-cycle methods. <b>Petr Vacek.</b>
15:00-15:30	AULA 11. Monodromy group of decomposable Blaschke products of degree $2^n$ . <b>M. Eugenia Celorrio.</b>	AULA 11. Linear algebra in the category of linear systems. <b>Miguel Carriegos.</b>	AULA 11. Generating efficient vectors for pairwise comparison matrices. <b>Susana Furtado.</b>	AULA 11. The combinatorics under hyperinvariant subspaces. <b>Eulalia Montoro.</b>
15:00-15:30	AULA 12. Signed graphs with maximum nullity two. <b>Marina Arav.</b>	AULA 12. On the max $k$ -cut problem and the smallest signless Laplacian eigenvalue of a graph. <b>Leonardo de Lima.</b>	AULA 12. On the smallest positive eigenvalue of bipartite graphs. <b>Subhasish Behera.</b>	AULA 12. Wiener Index and Eccentricity after Edge contraction. <b>Joyentanuj Das.</b>
15:00-15:30	AULA 15. Design of an estimator with orthogonal projections for a linear regression model and its strong consistency. <b>Kensuke Aishima.</b>	AULA 15. Symmetrization Techniques in Image Deblurring. <b>Paola Ferrari.</b>	AULA 15. Partial Smoothness of the Numerical Radius at Matrices whose Fields of Values are Disks. <b>Michael Overton.</b>	AULA 15. The geometry of numerical ranges over finite fields. <b>Kristin Camenga.</b>
15:00-15:30	AULA 16. Doubly Structured Mappings and Backward errors for Matrix pencils arising in Optimal Control. <b>Mohit Kumar Baghel.</b>	AULA 16. Sturm-Liouville problem and linear transformation on eigenpolynomials. <b>Luis Miguel Angüas.</b>	AULA 16. New perturbation bounds for eigenvalues of quadratic eigenvalue problem for efficient damping optimization. <b>Ranjar Kumar Das.</b>	AULA 16. Properties of the shell of a square matrix and Shell-Extremal Eigenvalues. <b>Christos Chorianopoulos.</b>
15:00-15:30	AULA 6F. Total graphs of gain graphs. <b>Matteo Cavaleri.</b>	AULA 6F. Is there a Kemeny's constant for second-order random walks? <b>Dario Fasino.</b>	AULA 6F. Generating acyclic symmetric matrices with the minimum number of distinct eigenvalues. <b>Luiz Emilio Alem.</b>	AULA 6F. Rank distribution of graphs over the field of two elements. <b>Badriah Safarji.</b>

15:00-15:30	AULA SEMINARIOS. Verified error bounds for all eigenvalues and basis of invariant subspaces of a real symmetric matrix. <b>Shinya Miyajima.</b>	AULA SEMINARIOS. A defect-correction algorithm for quadratic matrix equations, with applications to quasi-Toeplitz matrices. <b>Beatrice Meini.</b>	AULA SEMINARIOS. Structured solutions of the reduced biquaternion matrix equations with applications. <b>Neha Bhadala.</b>	AULA SEMINARIOS. Quantum walk-based ranking algorithms for directed networks. <b>Paola Boito.</b>
15:30-16:00	AULA 3. New quantum divergence and barycenter with the spectral geometric mean. <b>Miran Jeong.</b>	AULA 3. Algebraic decoding for convolutional codes over modular integer rings. <b>Ángel Luis Muñoz Castañeda.</b>	AULA 3. How perturbations propagate along the solutions of linear ordinary differential equations: a relative error analysis. <b>Asma Farooq.</b>	
15:30-16:00	AULA 5. On some extensions of the class of Q-matrices. <b>Sushmitha P.</b>	AULA 5. Quasiseparable representations of Green matrices. <b>Yuli Eidelman.</b>	AULA 5. The (multivariate) Pascal matrix. <b>Helena Cobo.</b>	AULA 5. Linear preservers of semipositive matrices. <b>Sachindranath Jayaraman.</b>
15:30-16:00	AULA 6. Challenges and opportunities in solving Navier-Stokes equations in patient-specific left heart model. <b>Mahesh Nagargoje.</b>	AULA 6. Rational approximation for the recovery of short exponential sums. <b>Nadiia Derevianko.</b>		
15:30-16:00	AULA 7. On Completely Mixed Matrix Games. <b>Gomatam Ravindran.</b>	AULA 7. The range of combined matrices and doubly stochastic matrices. <b>Begoña Cantó.</b>	AULA 7. Obtaining the Jordan structure of a totally nonnegative matrix from the Jordan structures of an upper block echelon matrix. <b>Rafael Cantó.</b>	AULA 7. Trifactorization of pattern symmetric nonnegative matrices. <b>Damjana Kokol Bukovšek.</b>
15:30-16:00	AULA 10. Orbit-injective Covariant Quantum Channels. Orbit-injective Covariant Quantum Channels. <b>Degunag Han.</b>	AULA 10. On Q-tensor. <b>Sunil Kumar.</b>	AULA 10. Matrices Similar to Centrosymmetric Matrices. <b>Rubén Martínez Avendaño.</b>	AULA 10. High-dimensional multi-view clustering. <b>Alaeddine Zahir.</b>
15:30-16:00	AULA 11. On interpolation with finite Blaschke products. <b>Sergei Kalmykov.</b>	AULA 11. Tropical Matrix Exponential. <b>Ali M. Askar</b>	AULA 11. Decompositions of matrices into torsion matrices and zero-square matrices. <b>Esther García.</b>	AULA 11. The Waring problem for matrix algebras. <b>Peter Semrl.</b>
15:30-16:00	AULA 12. No cycle-spliced bipartite signed graph with nullity $\eta(\Sigma)=c(\Sigma)$ . <b>Suliman Khan.</b>	AULA 12. Existence of Characteristic-like Vertices on Trees with Matrix Weights. <b>Sumit Mohanty.</b>	AULA 12. Locating Eigenvalues of Unicyclic Graphs. <b>Rodrigo Braga.</b>	AULA 12. Topologically-induced suppression of explosive synchronization on graphs. <b>Manuel Miranda.</b>
15:30-16:00	AULA 15. Restarted pseudo-Lanczos bidiagonalization for the hyperbolic SVD. <b>Jose E. Román.</b>	AULA 15. Parallel High-Resolution Compact PFFT-Type Algorithms vs. Low-Dimensional Eigenvectors Solvers for 3D Subsurface Scattering Problems.. <b>Yuri Gryazin.</b>	AULA 15. Computational aspects related to Serre's reduction of underdetermined linear functional systems. <b>Mohamed Salah Boudellioua.</b>	AULA 15. On the numerical range of some structured matrices. <b>Rute Lemos.</b>
15:30-16:00	AULA 16. Canonical Forms for Strictly Regular Matrix Polynomials. <b>Richard Hollister.</b>	AULA 16. On a matrix perspective of Sobolev-type inner products and higher-order recurrence relations. <b>Edmundo J. Huertas.</b>	AULA 16. Optimizing the Rayleigh quotient with symmetric constraints and its application to perturbations of structured polynomial eigenvalue problems. <b>Anshul Parjapati.</b>	AULA 16. Geometric Estimates of Kernel Matrix Eigenvalues. <b>Mikhail Lepilov.</b>
15:30-16:00	AULA 6F. Complete resolution of the circulant nut graph order-degree existence problem. <b>Ivan Damnjanović.</b>	AULA 6F. On the directional derivative of Kemeny's constant. <b>Kate Lorenzen.</b>	AULA 6F. Number of non-isomorphic graphs obtained from a tree by switches. <b>Rosário Fernandes.</b>	AULA 6F. A low rank ODE for spectral clustering stability. <b>Stefano Sicilia.</b>

15:30-16:00	AULA SEMINARIOS. Old Song, New Verse – Easier Spectral Questions via Algebraic Restrictions. <b>Jeffrey Stuart.</b>	AULA SEMINARIOS. Recursion formulas for determinants of k-Tridiagonal Toeplitz Matrices. <b>Eugene Agyei-Kodie.</b>	AULA SEMINARIOS. Recent Progress in GMRES-Based Iterative Refinement for Weighted and Generalized Least-Squares Problems. <b>Eda Oktay.</b>	AULA SEMINARIOS. Quantum Hitting Time According to a Given Distribution. <b>Gianna M. Del Corso.</b>
16:00-16:30	AULA 3. Multi-variable Wasserstein means of positive definite operators. <b>Vatsalkumar Mer.</b>	AULA 3. An Algorithm to Compute a Minimal Input-State-Output Representation of a Convolutional Code. <b>Verónica Requena.</b>	AULA 3. Characterization of a sparse problem with stochastic coefficients to solve elliptic BVPs. <b>Jorge Morón Vidal.</b>	
16:00-16:30	AULA 5. On a question of Bhatia, Friedland and Jain. <b>Mandeep Singh.</b>	AULA 5. Frames and Finite-rank Integral Representations of Positive Operator-Valued Measures. <b>Jean-Pierre Gabardo.</b>	AULA 5. Spread Code Constructions from Abelian Non-Cyclic Groups. <b>Xaro Soler-Escrivá.</b>	AULA 5. Determinants of some special matrices. <b>Yogesh Kapil.</b>
16:00-16:30	AULA 6. Developing an efficient aeronautical design tool using modal decomposition and deep learning for fluid dynamics analysis. <b>Ashton Ian Hetherington.</b>	AULA 6. Finite time horizon mixed control of vibrational systems. <b>Zoran Tomljanovic.</b>		
16:00-16:30	AULA 7. Approximation of the smallest eigenvalue of large hermitian matrices dependent on parameters. <b>Mattia Manucci.</b>	AULA 7. On combinatorial matrix majorizations. <b>Alexander Guterman.</b>	AULA 7. Simplifying the compensation criteria for the real nonnegative inverse eigenvalue problem. <b>Roberto Canogar.</b>	AULA 7. Learning Co-embedding for Multi-type Data based on Integrated Symmetric Nonnegative Matrix Factorization. <b>Haesun Park.</b>
16:00-16:30	AULA 10. Geometry of sub-algebras of $\text{Hol}(\Gamma \cup \text{Int}(\Gamma))$ and zeros of holomorphic functions. <b>Babhrubahan Bose.</b>	AULA 10. Approximating manifold-valued functions. <b>Simon Jacobson.</b>	AULA 10. Jordan Structure and Stability of Schur Canonical Form. <b>Anastasiia Minenkova.</b>	AULA 10. NFFT in Parameter Learning for Nonlocal Image Denoising Models. <b>Andrés Miniguano Trujillo.</b>
16:00-16:30	AULA 11. Frame structure of Szego kernels in Hardy space of unit circle and Rational Approximation of ECG signals. <b>Anusree Sreedhara.</b>	AULA 11. Cyclic matrices, polynomial interpolation, and Sylvester equation over division rings. <b>Vladimir Bolotnikov.</b>	AULA 11. Self-dual polyhedral cones and their slack matrices. <b>João Gouveia.</b>	AULA 11. Linear maps preserving $(p, k)$ norms of tensor products of matrices. <b>Run Zheng.</b>
16:00-16:30	AULA 12. A topological characterization of signed graphs with stable positive semidefinite maximum nullity at most two. <b>Hein van der Holst.</b>	AULA 12. Laplacian spectra of cographs: A twin reduction perspective. <b>Sane Umesh Reddy.</b>	AULA 12. Recovering the Spectrum of a Graph Having Most of its Eigenvalues Shared by a Vertex Deleted Subgraph. <b>Alexander Farrugia.</b>	AULA 12. Quantifying the Topological Stability of a Simplicial Complex. <b>Anton Savostyanov.</b>
16:00-16:30	AULA 15. Solving linear systems of the form $(A + \gamma UU^T)\mathbf{x} = \mathbf{b}$ . <b>Chiara Faccio.</b>	AULA 15. Computation of the von Neumann entropy of large matrices via trace estimators and rational Krylov methods. <b>Michele Rinelli.</b>	AULA 15. V-AISM, an Approximate Inverse LU Preconditioner. <b>José Mas.</b>	AULA 15. An envelope for the spectrum of a square matrix. <b>Panayiotis Psarrakos.</b>
16:00-16:30	AULA 16. Polynomial approximations for the matrix logarithm with computation graphs. <b>Jorge Sastre.</b>	AULA 16. Matrix version of a three-term recurrence formula with rational coefficients for q-Hermite Sobolev-type orthogonal polynomials. <b>Víctor Soto Iarrosa.</b>	AULA 16. An inexact matrix-Newton method for solving eigenvector-dependent nonlinear eigenvalue problems. <b>Tom Werner.</b>	AULA 16. Spaces of matrices with a bounded number of eigenvalues. <b>Klemen Sivic.</b>

16:00-16:30	AULA 6F. On the minimal least eigenvalues of circulant graphs. <b>Bašić Milan.</b>	AULA 6F. An interactive user-friendly software supporting research in graph theory. <b>Kristina Kostić.</b>	AULA 6F. A geometric construction of isospectral graphs for the discrete magnetic Laplacian. <b>Fernando Lledó.</b>	AULA 6F. Graph Degeneracy and Orthogonal Vector Representations. <b>Lon Mitchell.</b>
16:00-16:30	AULA SEMINARIOS. Homotopy method for singular multiparameter eigenvalue problems. <b>Zhijun Wang.</b>	AULA SEMINARIOS. Symbol-Based Convergence Analysis in (Block) Multigrid Methods for saddle-point problems. <b>Isabella Furci.</b>	AULA SEMINARIOS. On Strongly Infinitely Divisible Matrices. <b>Samir Mondal.</b>	AULA SEMINARIOS. Numerical Computation of Quantum Graph Spectra. <b>Anna Weller.</b>

EDIFICIO NUEVO (ANEXO)	EDIFICIO MONTES (PRINCIPAL)	AULARIO	EDIFICIO FORESTALES
------------------------	-----------------------------	---------	---------------------