THURSDAY , June 15. Afternoon

MSI01. Combinatorial matrices.

17:00-17:30: **AULA SEMINARIOS**. On weight partitions of graphs and their applications. Aida Abiad.

17:30-18:00: **AULA SEMINARIOS**. Combinatorics behind signed graphs. Milica Andelic.

18:00-18:30: **AULA SEMINARIOS**. Multiplicative structures generated by alternating sign matrices. Rachel Quinlan.

18:30-19:00: **AULA SEMINARIOS**. Alternating Sign Matrices and Generalizations. Geir Dahl.

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

17:00-17:30: **AULA 10**. A simple yet effective tensor-based ODE model for Deep Learning. Davide Palitta.

17:30-18:00: **AULA 10**. A statistical POD approach for feedback boundary optimal control in fluid dynamics. Luca Saluzi.

18:00-18:30: **AULA 10**. Learning Feynman diagrams with tensor trains. Yuriel Núñez Fernández.

18:30-19:00: **AULA 10**. A weighted subspace exponential kernel for support tensor machines. Kirandeep Kour.

19:00-19:30: **AULA 10**. Empirical Tensor Train Approximation in Optimal Control. Mathias Oster.

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

17:00-17:30: **AULA 16**. Jordan-like decompositions of linear relations. Henrik Winkler.

17:30-18:00: **AULA 16**. Kernel and range representation of matrix pencils. Carsten Trunk.

18:00-18:30: **AULA 16**. Weyr characteristics perturbation results for matrix pencils. Francisco Martínez-Pería.

18:30-19:00: **AULA 16**. Small rank perturbations of H-expansive matrices. Dawie Janse van Rensburg.

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

17:00–17:30: **AULA 6**. The Short-term
Rational Lanczos Method and Applications. Stefano Pozza.

17:30–18:00: **AULA 6**. A tensor bidiagonalization method for higher-order
singular value decomposition with applications. Anas El Hachimi.

18:00–18:30: **AULA 6**. Error bounds for the approximation
of matrix functions with rational Krylov methods. Igor Simunec.

18:30–19:00: **AULA 6**. Applications of trace estimation techniques. Yousef Saad.

19:00–19:30: **AULA 6**. Extrapolation methods
for choosing a regularization parameter. Giuseppe Rodriguez.

MSC11. Eigenvalue applications and optimization in numerical linear algebra.

17:00–17:30: **AULA 7**. Model Order Reduction in
Gas Network Simulation and the Role of Eigenvalues. Sara Grundel.

17:30–18:00: **AULA 7**. Structured
eigenvalue optimization via rank-1 ODEs. Nicola Guglielmi.

18:00–18:30: **AULA 7**. Tributes to Michael Overton on the Occasion of His 70th Birthday.

18:30–19:00: **AULA 7**. Tributes to Michael Overton on the Occasion of His 70th Birthday.

MSC15. Connection between rational function/polynomial approximation and structured matrices for solving differential equations.

17:00–17:30: **AULA 3**. A $*$-product solver for linear
nonautonomous fractional differential equations. Fabio Durastante.

17:30–18:00: **AULA 3**. Rational approximation with
minimal sampling for Helmholtz-like problems. Davide Pradovera.

18:00–18:30: **AULA 3**. Rational approximations of
BEM systems for the 3D scalar Helmholtz equation. Simon Dirckx.

18:30–19:00: **AULA 3**. Polynomial preconditioning
with Faber polynomials for the Helmhotz equation. Olivier Sète.

MSC16. Orthogonal polynomials, matrix analysis and applications.

17:00–17:30: **AULA 15**. Spectral theory for bounded banded matrices with positive bidiagonal
factorization and mixed multiple orthogonal polynomials. Ana Foulquié-Moreno.

17:30–18:00: **AULA 15**. A generalisation of the Hermite-Biehler theorem. Mikhail Tyaglov.

18:00–18:30: **AULA 15**. Jacobi matrices on binary
trees: multilevel interpolations and boundedness. Vladimir Lysov.

MSC23. Tensors and quantum information.

17:00–17:30: **AULA 6F**. Hyperdeterminant,
Fermionic Fock space and entanglement. Frédéric Holweck.

17:30–18:00: **AULA 6F**. Quantum Wasserstein energy distance. Rafal Bistron.

18:00–18:30: **AULA 6F**. On perfect tensors and multipartite entanglement. Karol Zyczkowski.

MSC24. Representations of groups and algebras and related topics.

17:00–17:30: **AULA 5**. Representation theory of quantum algebras at
roots of unity through linear algebra techniques. Stéphane Launois.

17:30–18:00: **AULA 5**. U(h)-free
modules and weight representations. Eduardo Monteiro Mendonça.

18:00–18:30: **AULA 5**. The graphs of reduced words of apermutation. Ricardo Mamede.

18:30–19:00: **AULA 5**. Jordan type Artinian
Gorenstein algebras and related invariants. Pedro Macias Marques.

19:00–19:30: **AULA 5**. Carnot graded Lie algebras and chain ideal lattices. Pilar Benito.

MSC25. Solving matrix and tensor equations.

17:00–17:30: **AULA 11**. Galois group
actions and rational solutions of p(X) = A. Gerrit Goosen.

17:30–18:00: **AULA 11**. Automated proofs of operator statements. Clemens Hofstadler.

18:00–18:30: **AULA 11**. Trace Minimization Principles. Ren-Cang Li.

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