

		Conference Program NANMAT 2025	
Monday	3 November 2025	ZOOM LINK	
Time (RO)	Speaker	Title	Section
14:50		Conference opening	
15:00	Dan Crişan	Modeling geophysical fluid dynamics models with fractional Brownian motion	PDEs, Stochastic Methods
15:20	Hannelore Lisei	Approximation of nonlinear stochastic Schrödinger equations	
15:40	Adrian Muntean	A hybrid evolution model for preservation of cultural heritage: stochastic particles in a random continuum environment	
16:00	Break		
16:20	Maria Oprea	Learning with measures: The stochastic inverse problem	Scientific Machine Learning
16:40	Edgar Dobriban	How to use synthetic data for improved statistical inference?	
17:00	Gabriel Turinici	Regularized policy gradient algorithm for the Multi Armed Bandit	
Tuesday	4 November 2025	ZOOM LINK	
14:00	Sorin Grad	A fresh look at algorithms for solving smooth multiobjective optimization problems	Optimization, PDEs
14:20	Andrei Stan, Radu Precup	Nash equilibria of fractional functionals via a Dinkelbach–Ekeland type approach	
14:40	Beniamin Bogosel	Optimization of space-time periodic eigenvalues	
15:00	Cornel Murea	Topology optimization problems for clamped plates	
15:20	Break		
15:40	Florin Radu	Robust iterative schemes for Darcy and Darcy-Forchheimer flow in porous media	Iterative Methods
16:00	Nicolae Suciu	Three-dimensional explicit L scheme for Richards equation	
16:20	Emil Căţinaş	Computing the functions of matrices	
16:40	Break		
17:00	Octavian Agratini, Maria Crăciun	Generalizations of approximation processes based on squared binomial polynomial bases functions	Approximation Theory
17:20	Andra Malina, Teodora Căţinaş	Methods for interpolating scattered data	
17:40	Eduard Grigorićiu	A Stancu-Schurer type extension of higher order of the Cheney-Sharma operators	
18:00	Diana Otrocol	Best Ulam constant of a partial differential operator	
Wednesday	5 November 2025	ZOOM LINK	
14:00	Marina Vidraşcu	Validation of a mathematical model of arterial wall mechanics against experimental results	Mathematical Modeling
14:20	Radu Cîmpeanu	Nonlinear control of falling liquid films	
14:40	Maria Neuss-Radu	Effective interface laws of Navier-slip-type for Stokes flow through a thin elastic porous layer	
15:00	Stelian Ion	Water soil erosion. Numerical methods	
15:20	Break		
15:40	Cătălin Trenchea	H1 stability for 2D Navier-Stokes equations	Numerical Methods for PDEs
16:00	Daniela Căpăţină	A posteriori error analysis based on equilibrated flux for a CutFEM interface problem	
16:20	Călin Gheorghiu	Complex singularities of an initial-boundary value problem modelling viscous film flow	
16:40	Break		
17:00	Rareş Răhăian	On Tikhonov regularization for the elliptic Cauchy problem	PDEs, Inverse Problems
17:20	Andrei Caţaron	A regularising iterative algorithm for the Cauchy problem in elasticity	
17:40	Mihai Nechita	From conditional stability to optimal approximation for ill-posed elliptic PDEs	
18:00	Andreea Grecu	A Monte Carlo discretization method for nonlinear variational PDEs	
Thursday	6 November 2025	ZOOM LINK	
14:00	Victor Nistor	The method of layer potentials for polygons and domains with cylindrical ends	PDEs, Numerical PDEs
14:20	Iulia Cristian	Mass-conserving solutions of coagulation models	
14:40	Marius Tucsnak	Relaxation enhancement by controlled incompressible fluid flows	
15:00	Sebastian Aniţa	Systems of first order hyperbolic equations. A semigroup approach	
15:20	Nicolae Cîndea	Some remarks on high-order finite differences schemes. Consequences on the observability of the wave equation	
15:40	Break		
16:00	Victoriţa Dolean	Local feature filtering for scalable and well-conditioned domain-decomposed random feature methods	Data-Driven Methods for PDEs
16:20	Traian Iliescu	Data-driven operators for reduced order model stabilization	
16:40	Ionuţ Farcaş	Real-time prediction of plasma instabilities with sparse-grid-accelerated optimized dynamic mode decomposition	
17:00	Break		
17:20	Ştefania Petra	Generative assignment flows	Scientific Machine Learning
17:40	Mircea Petrache	Optimization and separability problems in equivariant deep learning	
18:00	Sorin Mitran	Adaptive information refinement for active media	
18:20	Radu Bălan	Quantitative bounds for sorting based permutation invariant embeddings	
18:40	Alexandru Tămăşan	Reconstruction of the conformal factor in a two dimensional anisotropic current density impedance imaging problem	Inverse Problems, PDEs
19:00		Conference closure	