



Thursday 29.05.2025

N110 hall (Faculty of Mechanics, Bulevardul Mihai Viteazu Nr. 1)

09:00 - 10:30 Registration and coffee break

Plenary Session

10:30 - 10:45 Opening ceremony

10:45 - 11:30 Keynote lecture, Aleksandar Takači, *University of Novi Sad*, Fuzzy sets and Statistics

11:30 - 12:15 Keynote lecture, Sorin Nădăban, *“Aurel Vlaicu” University of Arad*, Fuzzy Normed Linear Spaces: A General View

12:15 - 13:00 Keynote lecture, Adrian Saracila joint talk with Bogdan Stefan, NewPharma development, Convergence between Data, AI and Automatization

13:00 - 14:00 Quick Lunch (Room 104)

Session 1A - Mathematical Analysis and Applications

Session Chair: Daniela Inoan

15:00 – 15:15 - Daniela Inoan *Variational relations problems: existence and calmness results*

15:15 – 15:30 Ariana Găina - *A new perspective on integral characterizations of uniform dichotomies in Banach spaces*

15:30 – 15:45 Cho Jinyoung (joint work with Cristian Lăzureanu) - *On a Hamiltonian-Poisson system on $SO(3)$ with critical energy state curves intersecting at a cusp*

15:45 – 16:00 Luminița-Ioana Cotîrlă – *New subclasses of bi-univalent functions defined by $(p; q)$ -derivative operator subordinate to Lucas-balancing polynomials*

16:00 – 16:15 Bogdan Maxim - *A general quasilinear elliptic problem involving variable exponents, homogeneous Neumann boundary conditions, and its applications to image processing*

16:15 – 16:30 Laura Manolescu - *K-frames in Hilbert spaces*

16:30 – 16:45 Ioan-Viorel Naghi (joint work with Cristian Lăzureanu) - *Local stability and bifurcations in a delayed Ricker model*

16:45 – 17:00 Cristian Lăzureanu (joint work with Cristiana Căplescu) - *On a six-dimensional Shimizu-Morioka model*

17:00 – 17:15 Mădălina Pașca (joint work with Cristian Lăzureanu) - *On a delayed logistic map*

N210 hall (Faculty of Mechanics, Bulevardul Mihai Viteazu Nr. 1)

Session 1B - Applied Mathematics in Engineering and Economics / Dynamical Systems and their Applications

Session Chair: Alexandru Mihai Bica

15:00 – 15:15 Pelle Remus-Nicolae (joint work with Alexandru Mihai Bica) - *Convergence properties of Green's function method for fifth order two-point BVPs with deviating argument*

15:15 – 15:30 Bogdan Căruntu - (joint work with Mădălina Pașca, Olivia Bundău and Adina Juratoni) *The Piecewise Polynomial Least Squares Method for Systems of Differential Equations with Application to a Blood Flow Model*

15:30 – 15:45 Vasilica-Mihaela Dumitrache - *Temperature transfer in a double-periodic composite consisting of three materials with different resistivity*

15:45 – 16:00 Loredana-Camelia Culda - *An oligopoly Stackelberg-Cournot model*

16:00 – 16:15 Loredana Gabor - *Stability and Hopf bifurcation analysis of a five-dimensional unemployment model with distributed time delays*

16:15 – 16:30 Andreea-Maria Ardeuan - *A dynamic analysis of a two-dimensional socioecological system*

16:30 – 16:45 Șerban E. Vlad - *On the orbits of the Boolean asynchronous systems that fulfill the generalized technical condition of proper operation*

16:45 – 17:00 Daniel Pașca - *Equilibria and stability in the restricted $(n+1)$ -body problem with logarithm potential*

17:00 – 17:15 Anna-Monika Muscaș - *The circular restricted 4-body problem with logarithmic potential with three equal primaries in the triangular central configuration of the 3-body problem*

17:15 – 17:30 Nicolae Lupa - *Generalized dichotomies via evolution semigroups*

Friday 30.05.2025

N110 hall (Faculty of Mechanics, Bulevardul Mihai Viteazu Nr. 1)

Plenary Session

09:00 - 09:45 Keynote lecture, Emilian Părau, *University of East Anglia*, Nonlinear hydroelastic waves

09:45 - 10:30 Keynote lecture, Radu Ioan Boț, *University of Vienna*, Tikhonov regularization of monotone operator flows: strong convergence of the trajectories and fast residual decay

10:30 - 11:15 Keynote lecture, Radu Miculescu, *Transilvania University of Brasov*, Iterated function systems and applications

11:15 - 11:45 *Coffee break*

Session 2A - Mathematical Analysis and Applications

Session Chair: Vedat Suat Ertürk

11:45 – 12:00 Vedat Suat Ertürk (joint work with Bogdan Căruntu) - *The Conformable Polynomial Least Squares Method for fractional differential equations*

12:00 – 12:15 Flavius Pater (joint work with Tudor Bînzar) - *On some properties for the fuzzy bounded operators spectra applied to fuzzy Volterra operator*

12:15 – 12:30 Emanuel Cismaș - *Partially defined operators on locally Hilbert spaces*

12:30 – 12:45 Bogdan-Cristian Anghelina - *On the continuous dependence of mixed possibly infinite iterated function systems*

12:45 – 13:00 George Popescu - *Rhaly operators and Sub Cesaro operators*

N210 hall (Faculty of Mechanics, Bulevardul Mihai Viteazu Nr. 1)

Session 2B - Algebra and Geometry, Computer Algebra Systems in Research / Probability and Statistics. Applications in Health and Clinical Research

Session Chair: Takeshi Matsuda

11:45 – 12:00 Gheorghe Moza - *Bounded orbits in a class of predator-prey models*

12:00 – 12:15 Sava Gîrban - *Curvature flows for discrete curves*

12:15 – 12:30 Ioana-Claudia Lazăr - *Minimal displacement set for $CAT(0)$ cubical complexes*

12:30 – 12:45 Takeshi Matsuda - *Topological Invariants of Hypergraphs via Toric Ideals and Their Applications to Medical Data Science Fields*

12:45 – 13:00 Romeo Negrea - *On the Lipschitz inequality, some extensions and applications to a class of the stochastic integral equations*

13:00 – 13:15 Diana Rodica Radnef-Constantin - *The lifetime of a pulsatory liposome*

Festive Lunch at Recaș Winery – departure at 14.00 from Piața Nicolae Bălcescu bus station