

CONFERENCE PROGRAMME

Tuesday, May 28

12.00-13.00	Registration (Lobby)
13.00-13.55	Lunch
14.00-14.15	Opening of the Conference (Palanga hall)

PLENARY TALKS (PALANGA HALL)

14.15-15.00	Tarmo Soomere	<i>Mathematics of extremes in coastal and marine science</i>
15.00-15.45	Minvydas Ragulskis	<i>Solitary solutions to the hepatitis C model with the proliferation of infected and uninfected hepatocytes</i>
15.45-16.15	Coffee Break	
16.15-17.00	Neville J Ford	<i>Modelling and simulation of systems with complex characteristics: certainties, uncertainties and compromises</i>
17.00-17.45	Luigi Brugnano	<i>Recent advances in the numerical solution of ordinary and fractional differential equations</i>

19.00-21.00	Welcome Party, Photographing 20.00 (Lahe hall)
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Wednesday, May 29

PLENARY TALKS (PALANGA HALL)

9.00-9.45	Kai Diethelm	<i>Fast numerical algorithms for the evaluation of Riemann-Liouville integrals</i>
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9.45-10.30	Martin Stynes	<i>A general collocation analysis for weakly singular Volterra integral equations with variable exponent</i>
10.30-11.00	Coffee Break	

Section I. Differential equations I (PIRITA HALL)

11.00-11.20	Michal Braš	<i>High order second derivative diagonally implicit multistage integration methods for ODEs</i>
11.20-11.40	Sigita Urboniene, Natalija Sergejeva	<i>The Fucik type problem with nonlocal two-point boundary conditions</i>
11.40-12.00	Olga Štikoniene, Mifodijus Sapagovas	<i>Finite difference method for elliptic equation with two multiple integral conditions</i>
12.00-12.20	Kristina Pupalaige, Mifodijus Sapagovas	<i>On the convergence of the difference scheme for nonlinear parabolic equation with integral boundary condition</i>
12.20-12.40	Concetta Laurita, Peter Junghanns	<i>On the numerical solution of the Neumann problem for Laplace's equation in planar domains with corners</i>
12.40-13.00	Janis Bajars, Anna Simina	<i>Explicit time integration of source-free dynamical systems</i>

Section II Fractional differential equations (PARALEPA HALL)

11.00-11.20	Natalia Kopteva	<i>Pointwise-in-time a-priori and a-posteriori error control for time-fractional parabolic equations</i>
11.20-11.40	Luis L. Ferras	<i>Integrating fractional differential equations with neural networks for dynamical systems modelling</i>
11.40-12.00	Magda Rebelo	<i>A polynomial collocation method for the Lighthill's problem</i>

12.00-12.20	Mikk Vikerpuur	<i>Approximate solutions to linear fractional integro-differential equations</i>
12.20-12.40	Kaido Lätt	<i>About the numerical solution of singular fractional integro-differential equations</i>
12.40-13.00	Margus Lillemäe	<i>On central part interpolation approximations for systems of fractional differential equations</i>

13.00-14.00	Lunch
14.15-21.30	Excursion and dinner at Maria Farm.

Thursday, May 30

PLENARY TALK (PALANGA HALL)

9.00-9.45	Pedro Lima, Daniele Avitabile, Nikolai Chemetov	<i>Mathematical modeling of neural fields with diffusion</i>
9.45-10.00	Break	

Section I. Mini symposium „ Application of zeta functions for approximation of analytical functions“, organized by A. Laurinčikas and D. Šiaučiūnas (PIRITA HALL)

10.00-10.20	Antanas Laurincikas, Darius Šiaučiūnas	<i>On zeta-function of certain cusp forms</i>
10.20-10.40	Darius Šiaučiūnas	<i>On the mean square of the Hurwitz zeta-function in short intervals</i>
10.40-11.00	Antanas Laurinčikas	<i>Approximation by Beurling's zeta-functions</i>

Section II. Mini symposium "Nonlocal differential problems and their applications" , organized by K. Kaulakytė and R. Čiegis (PÄRNU HALL)

10.00-10.20	Kristina Kaulakytė	<i>Time periodic inverse problem with nonlocal condition</i>
10.20-10.40	Rita Juodagalvyte	<i>Regularity results for very weak time-periodic Poiseuille-type solution with minimally regular flow rate</i>
10.40-11.00	Nikolajus Kozulinas	<i>Blood flow modelling in human heart using FSI</i>

11.00-11.30 Coffee Break

Section I. Mini symposium „ Application of zeta functions for approximation of analytical functions “, organized by A. Laurinčikas and D. Šiaučiūnas (PIRITA HALL)

11.30-11.50	Renata Macaitiene	<i>Some generalized limit theorems for the Epstein zeta-function</i>
11.50-12.10	Mindaugas Jاسas	<i>Approximation of analytic functions by shifts of absolutely convergent Dirichlet series related to periodic zeta-functions</i>
12.10-12.30	Hany Hill Yewakiem Gerges, Renata Macaitiene	<i>Joint mixed limit theorem for Epstein and Hurwitz zeta-functions</i>
12.30-12.50	Audrone Rimkeviciene, Aidas Balčiūnas	<i>Discrete version of the Mishou theorem for absolutely convergent Dirichlet series related to periodic zeta-functions</i>

Section II. Modelling I (PÄRNU HALL)

11.30-11.50	Ksenija Varfolomejeva, Alexander Šostak	<i>Operators of fuzzy mathematical morphology</i>
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11.50-12.10	Alexander Prokopenya	<i>Stability analysis of stationary motion of the 3D Swinging Atwood's machine</i>
12.10-12.30	Boleslovas Dapkūnas	<i>Modelling of bacterial plume formation in a circular container</i>
12.30-12.50	Inara Yermachenko, Armands Gritsans	<i>On a solvability of a three-parameter problem arising in heat transfer</i>

13.00-14.00	Lunch
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Section I. Mini symposium „ Application of zeta functions for approximation of analytical functions “, organized by A. Laurinčikas and D. Šiaučiūnas (PIRITA HALL)

14.20-14.40	Toma Mikalauskaite	<i>On generalized shifts of the Lerch zeta-function</i>
14.40-15.00	Roma Kačinskaitė	<i>Notes on simultaneous approximation by the class of zeta-functions</i>
15.00-15.20	Monika Tekorė	<i>Approximation of analytic functions by shifts of the periodic zeta-functions</i>
15.20-15.40	Virginija Garbaliuskienė	<i>On discrete shifts of the Mellin transform of the Riemann zeta-function</i>
15.40-16.00	Aidas Balčiūnas	<i>On the Laplace transform of the Riemann zeta-function II</i>

Section II. Modelling II, Numerics (PÄRNU HALL)

14.20-14.40	Daniele Funaro, Lorella Fatone	<i>A nonlinear backward diffusion algorithm for image restoration</i>
14.40-15.00	Maksims Marinaki, Manfreds Šņeps-Šņeppe	<i>On mathematical modelling and simulation of immune system's response in tumor treatment</i>

15.00-15.20	Uldis Štrautins, Maksims Marinaki	<i>On simulation with particle motion tracking for biomass extraction process</i>
15.20-15.40	Maris Gunars Dzenis	<i>CO and CO₂ concentration in biomass combustion process depending on biomass porosity</i>
15.40-16.00	Evely Kirsiaed, Peeter Oja	<i>Periodic cubic spline histopolation</i>

16.00-16.30	Coffee Break	
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Section I. Integral equations (PIRITA HALL)

16.30-16.50	Shraddha Ramanbhai Christian, Andrejs Reinfelds	<i>Hyers-Ulam stability of implicit Volterra equations on time scales</i>
16.50-17.10	Luisa Fermo, Domenico Mezzanotte, Donatella Occorsio	<i>A global approximation method for second-kind Volterra-Fredholm equations</i>
17.10-17.30	Maria Grazia Russo, Luisa Fermo, Anna Lucia Laguardia, Concetta Laurita	<i>A global approximation method for second-kind nonlinear integral equations</i>
17.30-17.50	Hanna Britt Soots	<i>Collocation based approximations for fractional boundary value problems</i>

Section II. Numerics (PÄRNU HALL)

16.30-16.50	Ville Turunen	<i>Time-frequency analysis in Euclidean spaces</i>
16.50-17.10	Gert Tamberg, Maria Zeltser	<i>On derivative sampling and convergence in variation of generalized Shannon sampling series</i>

17.10-17.30	Ryszard Kozera, Magdalena Wilko Lazka	<i>Curve estimation with modified complete splines and exponential parameterization</i>
17.30-17.50	Davis Kalvans, Janis Bajars	<i>Learning Hamiltonian dynamics with structure-preserving neural networks and dimensionality reduction</i>

19.30-24.00	Conference Banquet (Lahe hall)	
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Friday, May 31

Section I. Mini symposium „ Fractional calculus, fractal sets and zeta functions “, organized by E. Guariglia (PIRITA HALL)

9.00-9.20	Emanuel Guariglia	<i>Chebyshev wavelets and applications</i>
9.20-9.40	Waldo Arriagada	<i>Local fractal functions of higher order and symmetries</i>
9.40-9.50	Break	

Section I. Ill-posed problems (PIRITA HALL)

9.50-10.10	Hany Hill Yewakiem Gerges, Jaan Janno	<i>Numerical approaches to solve an inverse problem for a fractional diffusion-wave equation with multi-term fractional powers of minus Laplacian</i>
10.10-10.30	Urve Kangro, Uno Hämarik	<i>On convergence conditions in self-regularization of ill-posed problems by projection methods</i>
10.30-10.50	Toomas Raus	<i>New heuristic parameter choice for the class of regularization methods</i>

10.50-11.20	Coffee Break	
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Section I. Differential equations II (PIRITA HALL)

11.20-11.40	Artūras Štikonas, Mifodijus Sapagovas	<i>Discrete Sturm–Liouville problem for two-dimensional elliptic equation with the multiple integral in nonlocal condition</i>
11.40-12.00	Svetlana Atslega, Felix Sadyrbaev	<i>On interaction of sets of periodic solutions</i>
12.00-12.20	Felix Sadyrbaev	<i>On sensitive dependence of solutions on the initial data in ordinary differential equations</i>
12.20-12.40	Kristina Bingelė, Artūras Štikonas	<i>Investigation of a discrete Sturm–Liouville problem with two-point nonlocal boundary condition</i>

12.40-13.00 Closing of the Conference (PIRITA HALL)

13.00-14.00 Lunch