

Monday, July 21, Morning Session

8:00-9:00	Registration (Foyer Lehmann-HS)		
Plenary Session: Lehmann-HS			
9:00-9:30	Opening Session: Welcome Address		
9:30-10:30	Improving Boundary Element Approximations Using Non-polynomial Enrichment Jon Trevelyan		
10:30-11:00	Coffee Break		
	Lehmann -HS	HS A	HS B
11:00-11:30	The Dirichlet problem for elliptic systems with data in L_p Dorina Mitrea	On the influence of stochastic moments in the solution of the neutron point kinetic equation Milena Wollmann Da Silva	A functional analytic approach to homogenization problems Massimo Lanza de Cristoforis
11:30-12:00	On some new constructions in the theory of elliptic boundary value problems Vladimir Vasilyev	An Analytical Representation for the Solution of Neutron Sn Kinetic Transport Equation in Slab Geometry Ricardo Barros	Shape sensitivity analysis of the eigenvalues of the Reissner-Mindlin system Davide Buoso
12:00-12:30	On the fundamental tones of free vibrating plates Luigi Provenzano	Half-life distribution shift of fission products by coupled fission-fusion processes Bardo E.J. Bodmann	Numerical solutions and error bounds for oscillatory neural networks Barbara Zubik-Kowal
12:30-14:00	Lunch Break		

Monday, July 21, Afternoon Session

	Lehmann -HS	HS A	HS B
14:00-14:30	Analysing Non-Rectangular Images Using The Finite Element Method Paul Harris	Neutral Particle Detector Reading Estimate via Discrete Ordinates Adjoint Transport Problems in Slab Geometry Ricardo Barros	Mathematical modeling to quantify the pharmacokinetic process of [18F]2-fluor-2deoxy-D-glucose (FDG) Eliete Biasotto Hauser
14:30-15:00	Use of Decomposition Methods and Adomian Polynomials to Solve Point Kinetic Equations Free of Stiffness Problems Coupled to Feedback Effects Antonio Alvim	Multi-group Neutron Propagation in Transport Theory by Space Asymptotic Methods Julio Cesar Lombaldo Fernandes	Automatic Separation of Retinal Vessels into Arteries and Veins Using Ensemble Learning Nafise Ramezani
15:00-15:30	Performance of Higher Order Numerical Method to Solve the Ordinary Differential Equation by Taylor Series Hiroshi Hirayama	The Multi-group Neutron Diffusion Equation in General Geometries Using The Parseval Identity Bardo Bodmann	Super-Algebraic Convergent Solver for Scattering by Biperiodic Gratings Thomas Rösch
15:30-16:00	Coffee Break		
16:00-16:30	Solvability of a nonstationary problem of radiative-conductive heat transfer in a system of semitransparent bodies Andrey Amosov	On the fractional derivative neutron point kinetics equation solution with temperature feedback Antonio Carlos Marques Alvim	
16:30-17:00	Integral Equation Representation of the Solutions to Transmission Problems in Micropolar Elasticity Stan Potapenko	Multi-Particle Collision Algorithm for Solving an Inverse Radiative Problem Reynier Hernandez	

Tuesday, July 22, Morning Session

Plenary Session: Lehmann-HS			
9:00-10:00	Weak Compactness Methods for Integro-Differential Equations in L1 Iain W. Stewart		
Coffee Break			
	Lehmann -HS	HS A Minisymposium <i>Asymptotic Analysis:</i> <i>Homogenization and Thin Structures</i>	HS B
10:30-11:00	Half-Linear Second Order Differential Equations: Distances between consecutive zeros of Oscillatory Solutions Tadie	On the interface boundary conditions between two interacting incompressible viscous fluid flows Alain Brillard	L1-Regularized Regression Modeling of Functional Connectivity Maria Puhl
11:00-11:30	The Analysis of Beef-Suckler Herd using delay differential equations Thuria Belhaj	Asymptotic analysis of the Steklov spectral problem in thin perforated domains with rapidly varying thickness and different limit dimensions Andrii Popov	A mixed impedance scattering problem for partially coated obstacles in two-dimensional linear elasticity Vassilios Sevrouglou
11:30-12:00	The radiative conductive transfer equation in cylinder geometry and its application to rocket launch exhaust phenomena Cibele Aparecida Ladeia	Spectral problems in porous media: on critical relations for large adsorption parameters in Robin boundary conditions M. Eugenia Pérez	Infiltration in porous media: On the construction of a functional solution method for the Richards equation Bardo Bodmann
Lunch Break			

Tuesday, July 22, Afternoon Session

	Lehmann -HS	HS A <i>Minisymposium Asymptotic Analysis: Homogenization and Thin Structures</i>	HS B
14:00-14:30	A Smooth Solution of a Singular Fractional Differential Equation Kaido Lätt	Spectral properties of elliptic operator with double-contrast coefficients near a hyperplane Andrii Khrabustovskyi	A fully discrete collocation method based on central part approximations by splines Kerli Orav-Puurand
14:30-15:00	The Nonsmooth Principle of Hamilton as Variational Inequality for Impact Systems Kerim Yunt	Spectral problems in banded domains: local effects for eigenfunctions Delfina Gomez	Smoothing transformation and cubic spline collocation for weakly singular Fredholm integral equations Mikk Vikerpuur
15:00-15:30	Optimal control of partial differential equations by using Stackelberg strategies: an environmental application Miguel Ernesto Vazquez-Mendez	Homogenization of oscillating boundaries of hinged plates via unfolding method Pier Lamberti	Spline collocation for fractional integro-differential equations Arvet Pedas
15:30-16:00	Coffee Break		
16:00-16:30	Oscillation Criteria for some Third Order Linear Ordinary Differential Equations Tadie Tadie	Locally periodic thin domains with varying period José M. Arrieta	Retinal Image Quality Assessment Using Shearlet Transform Hamid-Reza Pourreza
16:30-17:00	A Variable Structural Control of an Elastic Robot System Xuezhang Hou	Burnett coefficients and laminates Loredana Balilescu	Modeling and Implementation of Demand Dispatch Approach in a Smart Micro-Grid Habib Rajabi Mashhadi
17:00-17:30		Semidiscrete and Asymptotic Approximations for the Nonstationary Radiative-Conductive Heat Transfer Problem in a Periodic System of Grey Heat Shields Andrey Amosov	

Wednesday, 23 July

Plenary Session: Lehmann-HS			
9:00-10:00	Boundary Potentials and Elliptic Boundary Value Problems Wolfgang Wendland		
Coffee Break			
	Lehmann-HS Minisymposium: <i>Wave Phenomena</i>	HS A Mnisymposium <i>Asymptotic Analysis: Homogenization and Thin Structur</i>	HS B
10:30-11:00	An adaptive space-time discontinuous Galerkin method for Maxwell's equations Christian Wieners	Asymptotic expansion of the solution of the Kelvin-Voigt visco-elasticity equation for a thin strip Grigory Panasenko	A Soft-Sensor Approach to Probability Density Function Estimation Javad Poshtan
11:00-11:30	On the NZCZ method for Maxwell's equations Tobias Jahnke	Homogenization of the frictional contact problems on a periodic microstructure Julia Orlik	A mesoscopic model of cell trajectories C. Etchegaray
11:30-12:00	Error analysis of implicit Runge-Kutta methods and discontinuous Galerkin discretizations for linear Maxwell's equations Tomislav Pazur	Asymptotic Approximations for Chemical Reactive Flows Through the Exterior Thick Fractal Junctions Taras Mel'Nyk	Asymptotic solution of Maxwell equations in a layered periodic structure with frequency being close to a stationary point of the Maria Perel
Lunch Break			
13:30-18:00	Excursion to Kloster Maulbronn (Maulbronn Monastery)		

Thursday, July 24, Morning Session

Plenary Session: Lehmann-HS			
9:00-10:00	The Method of Volume Integral Equation Martin Costabel		
10:00-10:30	Coffee Break		
	Lehmann -HS	HS A	HS B
10:30-11:00	Traveling-wave solutions of the Modified Buckley-Leverett Equation Ying Wang	A Fast Calculation Method for Analyzing the Effect of Wind Generation on ATC Habib Rajabi Mashhadi	Analysis of Boundary-Domain Integral Equations for Variable-Coefficient Dirichlet BVP in 2D Tamirat Temesgen Dufera
11:00-11:30	Onset to Separated Water-Layer in Three-Phase Stratified Flow Mehmet Orkun	A Study of Brazilian Extreme Meteorological Events by Data Mining Techniques Haroldo Campos Velho	A Characteristic of Nonuniqueness for Equations of the First Kind Christian Constanda
11:30-12:00	Derivation of dispersion parameters and eddy diffusivities shear dominated applied to stable boundary layer Cecília Perobelli Ferreira	On Domain Optimization for Closed Acoustic Waveguides Julian Ott	Dependence of Norms of Localized Boundary-Domain Integral Operators on Scaling Sergey E. Mikhailov
12:00-14:00	Lunch Break		

Thursday, July 24, Afternoon Session

	Lehmann-HS Minisymposium <i>Inverse Problems</i>	HS A	HS B
14:00-14:30	Combining frequency-difference and ultrasound-modulated EIT Bastian v. Harrach	An Improved Method for Predicting Droplet Size Distributions Gene Kouba	Boundary-Domain Integral Equations for the Stokes system with variable viscosity C.F. Portillo
14:30-15:00	Exact reconstruction formulas for a Radon transform over cones Markus Haltmeier	Boundary element analysis of magnetohydrodynamic pipe flow considering the pipe wall thickness Nuray Öktem	Mixed Impedance Transmission Problems for Vibrating Layered Elastic Bodies David Natroshvili
15:00-15:30	Far field splitting for the Helmholtz equation Roland Griesmaier	Asymptotic behavior of the longitudinal permeability Paolo Musolino	A Note on Transforming a Plane Strain First Kind Fredholm Integral Equation into an Equivalent Second Kind Equation Shirley Pomeranz
15:30-16:00	Coffee Break		
16:00-16:30	Characterization of interior eigenvalues from multi-frequency time-harmonic scattering data Armin Lechleiter		
16:30-17:00	The cone beam transform for vector fields: analysis and inversion formulas Thomas Schuster		
17:00-17:30	Transformed and Generalized Localization for Ensemble Methods in Data Assimilation Roland Potthast		
19:00	Conference Dinner		

Friday, July 25, Morning Session

Plenary Session: Lehmann-HS			
9:00-10:00	The Mighty Double Layer: History and Perspectives Marius Mitrea		
10:00-10:30	Coffee Break		
	Lehmann -HS	HS A	HS B
10:30-11:00	On a model for pollutant dispersion in the atmosphere with partially reflective boundary conditions Jaqueline Loeck	Interaction of Acoustic Waves and Piezoelectric Structures George Chkadua	The Factorization Method for Inverse Acoustic Scattering in a Layered Medium Oleksandr Bondarenko
11:00-11:30	Two reasons why pollution dispersion modelling needs bi-linear forms Bardo Bodmann	A Spectral Volumetric Integral Equation Method for Ocean Acoustics with Depth-Dependent Background Sound Speed Tobias Rienmueller	Analysis of Extended two-operator Boundary-Domain Integral Equations for a variable Coefficient Dirichlet BVP Tsegaye G. Ayele
11:30-12:00	A solution for pollutant dispersion in atmosphere considering nonlocal closure of the turbulent diffusion Daniela Buske	The factorization method for the acoustic transmission problem Andreas Kleefeld	Analysis of functionally graded beams on nonlinear elastic foundation using Hamiltonian approach technique Hadi Ebrahimikhah
12:00-14:00	Lunch Break		

Friday, July 25, Afternoon Session

	Lehmann -HS	HS A	HS B
14:00-14:30	<p>The wind meandering phenomenon in a eulerian three-dimensional model to simulate the pollutants dispersion</p> <p>Viliam Cardoso da Silveira</p>	<p>On trapped modes in channels with fixed and freely floating bodies</p> <p>Keijo Ruotsalainen</p>	<p>Solvability and Asymptotic Analysis of Dynamical Mixed Problems of Electro-Magneto-Elasticity for Domains with Cracks</p> <p>Otar Chkadua</p>
14:30-15:00	<p>DRBEM simulation on mixed convection with hydromagnetic effect</p> <p>Canan Bozkaya</p>	<p>Hyperspectral Image Classification by Neural Network and Non-linear PCA with Hardware Implementation</p> <p>Haroldo Campos Velho</p>	<p>Anisotropic Fundamental Solutions for Linear Elasticity and Heat Conduction Problems based on the Crystalline Class Hierarchy governed Decomposition Method</p> <p>Tales De Vargas Lisbôa</p>
15:00-15:30	<p>On the analytical representation for the solution of the coupled Advection-Diffusion and Navier-Stokes Equation</p> <p>Regis Quadros</p>	<p>Energy conservation low for the turbulent motion in the free atmosphere</p> <p>K.Kaliyeva</p>	