

New Trends in Parameter Identification for Mathematical Models

IMPA, Rio de Janeiro, October 30th to November 3rd, 2017

Chemnitz Symposium on Inverse Problems 2017 (on Tour in Rio)

Symposium on Inverse Problems in Science and Engineering

Time slots include 5 minutes for discussion

Ricardo Mañé Auditorium

Hour	Monday, 30
8:40 - 9:20	George S. Dulikravich (Florida International Univ.) <i>Parameter Identification in Differential Equations: A Hybrid Minimization Based Method</i>
9:20 - 10:00	Johann Baumeister (Frankfurt Univ.) <i>Online Identification of Parameters in Time Dependent Differential Equations Using Partial Observation</i>
10:00 - 10:30	Coffee Break
10:30 - 11:10	Carlos J. S. Alves (Inst. Superior Técnico de Lisboa) <i>The Reciprocity Functional and its Application to the Solution of Inverse Problems</i>
11:10 - 11:50	Robert Plato (Univ. Siegen) <i>Some new convergence rates results on variational Lavrentiev regularization for nonlinear monotone ill-posed problems</i>
11:50 - 12:30	Zbigniew Bulinski (Silesian Univ. of Technology) <i>Application of the Proper Orthogonal Decomposition for Bayesian Estimation of flow parameters in porous medium</i>
12:30 - 14:00	Lunch
14:00 - 14:40	Shuai Lu (Fudan Univ. Shanghai) <i>On parameter identification in linear stochastic differential equations by Gaussian statistics</i>
14:40 - 15:20	Rubens Sampaio (PUC, Rio de Janeiro) <i>Smooth Modes as a Tool for Operational Modal Analysis: New Developments</i>
15:20 - 15:40	Coffee break
15:40 - 16:20	Frank Werner (Max Planck Inst., Goetingen) <i>Empirical Risk Minimization as Parameter Choice Rule for Filter based Regularization Methods</i>
16:20 - 17:00	Haroldo de Campos Velho (INPE, Sao Paulo) <i>Parameter Identification in Mathematical Forecasting Models Depending on Prediction Time Scale</i>
17:00 - 19:00	Cocktail

New Trends in Parameter Identification for Mathematical Models

IMPA, Rio de Janeiro, October 30th to November 3rd, 2017

Chemnitz Symposium on Inverse Problems 2017 (on Tour in Rio)

Symposium on Inverse Problems in Science and Engineering

Time slots include 5 minutes for discussion

Ricardo Mañé Auditorium

Hour	Tuesday, 31
9:20 - 10:00	Juan Pablo Agnelli (Universidad Nacional de Cordoba) <i>On the identification of piecewise constant coefficients in optical diffusion tomography by level set</i>
10:00 - 10:30	Coffee Break
10:30 - 11:10	Christian Clason (Univ. Duisburg-Essen) <i>Discrete Regularization of Parameter Identification Problems</i>
11:10 - 11:50	Jose Herskovits Norman (Univ. Federal Rio de Janeiro) <i>A Feasible Point Algorithm for Nonlinear Constrained Optimization and Some Applications to Parameter Identification</i>
11:50 - 12:30	Thomas Schuster (Univ. Saarbruecken) <i>Tomographic Terahertz Imaging Using Sequential Subspace Optimization</i>
12:30 - 14:00	Lunch
14:00 - 14:40	Andre Novotny (LNCC, Petropolis) <i>New Non-Iterative Reconstruction Method for a Class of Inverse Problems</i>
14:40 - 15:20	Uno Haemarik (Univ. Tartu, Estonia) <i>Heuristic Parameter Choice in Tikhonov Method from Minimizers of the Quasi-Optimality Function</i>
15:20 - 15:40	Coffee Break
15:40 - 16:20	Daniel Watzenig (Graz University of Technology) <i>Statistical Modeling and Bayesian Inference for Industrial Applications</i>
16:20 - 17:00	Urve Kangro (Univ. Tartu, Estonia) <i>On Self-Regularization of Ill-Posed Problems in Banach Spaces by Projection Methods</i>

New Trends in Parameter Identification for Mathematical Models

IMPA, Rio de Janeiro, October 30th to November 3rd, 2017

Chemnitz Symposium on Inverse Problems 2017 (on Tour in Rio)

Symposium on Inverse Problems in Science and Engineering

Time slots include 5 minutes for discussion

Ricardo Mañé Auditorium

Hour	Wednesday, 01
8:40 - 9:20	Guillermo Elicabe (Univ. Nacional de Mar del Plata) <i>Thermal Parameter Identification in Remote Heating</i>
9:20 - 10:00	Axel Osses (CMM, Chile) <i>Algebraic Reconstruction of Source and Attenuation in SPECT Using First Scattering Measurements</i>
10:00 - 10:30	Coffee Break
10:30 - 11:10	William Rundell (Texas T&M Univ.) <i>Inverse Coefficient Problems for Diffusion Operators: both Classical and Fractional Order</i>
11:10 - 11:50	Raul Lima (USP, Sao Paulo) <i>The Design of Electrical Impedance Tomographs Using an Observability Concept</i>
11:50 - 12:30	Fabio Margotti (UFSC, Brazil) <i>A Projection Strategy for Choosing the Regularization Parameter of Iterated Tikhonov Method in Banach Spaces</i>
12:30 - 14:00	Lunch
14:00 - 14:40	Nilson Costa Roberty (Univ. Federal do Rio de Janeiro) <i>Reconstruction of Coefficients and Source Parameters in Elliptic Systems</i>
14:40 - 15:20	Carolina Naveira-Cotta (Univ. Federal Rio de Janeiro) <i>Experimental-Theoretical Analysis of Biodiesel Synthesis in Micro-reactors with Inverse Problem Solution for Parameter</i>
15:20 - 15:40	Coffee Break
15:40 - 16:20	Fabio Bozzoli (Universita di Parma) Experimental Investigation about the Effect of Displaced Enhancement Devices on Local Convective Heat Transfer in Pipes
16:20 - 17:00	Gilmar Guimaraes (Univ. Federal de Uberlandia) <i>Transfer Function Based on Green's Function Method (TFBGF) Applied to the Thermal Parameter Estimation</i>

New Trends in Parameter Identification for Mathematical Models

IMPA, Rio de Janeiro, October 30th to November 3rd, 2017

Chemnitz Symposium on Inverse Problems 2017 (on Tour in Rio)

Symposium on Inverse Problems in Science and Engineering

Time slots include 5 minutes for discussion

Ricardo Mañé Auditorium

Hour	Thursday, 02
8:40 - 9:20	Christine Boeckmann (Univ. Potsdam) <i>Modified Iterative Runge-Kutta-Type Methods for Nonlinear Ill-Posed Problems and Applications</i>
9:20 - 10:00	Denis Maillet (LEMTA, Université de Lorraine) <i>Experimental Identification of Transfer Functions for Diffusive and/or Advective Heat or Mass Transfer for Linear Time Invariant</i>
10:00 - 10:30	Coffee Break
10:30 - 11:10	Bastian von Harrach (Univ. Frankfurt) <i>Monotonicity-based regularization of inverse coefficient problems</i>
11:10 - 11:50	Philippe Le Masson (IRDL, Université de Bretagne) <i>Simulation of Welding: Estimation of Heat Sources and Multiphysical Modelisation</i>
11:50 - 12:15	Christopher Hofmann (TU Chemnitz) <i>Numerical Studies of Recovery Chances for a Simplified EIT Problem</i>
12:15 - 12:40	Michael Quellmalz (TU Chemnitz) <i>An SVD Spherical Surface Wave Tomography</i>
12:40	FREE AFTERNOON (Holiday in Rio de Janeiro)

New Trends in Parameter Identification for Mathematical Models

IMPA, Rio de Janeiro, October 30th to November 3rd, 2017

Chemnitz Symposium on Inverse Problems 2017 (on Tour in Rio)

Symposium on Inverse Problems in Science and Engineering

Time slots include 5 minutes for discussion

Ricardo Mañé Auditorium

Hour	Friday, 03
8:40 - 9:20	Barbara Kaltenbacher (Univ. Klagenfurt) <i>All-at-once and Minimization Based Formulations of Inverse Problems and their Regularization</i>
9:20 - 10:00	Regina Almeida (LNCC, Petropolis) <i>Selection, Calibration and Validation of Models of Tumor Growth</i>
10:00 - 10:30	Coffee Break
10:30 - 11:10	Vinicius Albani (UFSC, Brazil) <i>Optimal Convergence Rates Results for Linear Inverse Problems in Hilbert Spaces</i>
11:10 - 11:50	Jari Kaipio (Univ. of Auckland) <i>Stochastic Boundary Maps and Uncertainties in Inverse Problems</i>
11:50 - 12:30	Adriano DeCezaro (Univ. Federal do Rio Grande) <i>On the Choice of the Tikhonov Regularization Parameter and the Discretization Level: A Discrepancy-Based Strategy</i>
12:30 - 14:00	Lunch
14:00 - 14:40	Liliane Barrichello (Univ. Federal do Rio Grande do Sul) <i>On the use of Analytical Techniques for Parameter Identification in Radiation and Particle Transport Models</i>
14:40 - 15:20	Alexandre Kawano (USP, Sao Paulo) <i>Simultaneous Identification of Source, Initial Conditions and Asynchronous Sources in the Vibration Problem of Euler-Bernoulli Beams</i>