The 11th International Conference Inverse Problems: Modeling and Simulation

May 26 - June 01, 2024, Malta

Conference Programme

CONFERENCE PROGRAMME

11th International Conference

Inverse Problems: Modeling and Simulation

(IPMS 2024)

held on May 26 – June 01, 2024, Paradise Bay Resort Hotel, Malta

http://www.ipms-conference.org

CONFERENCE PROGRAMME

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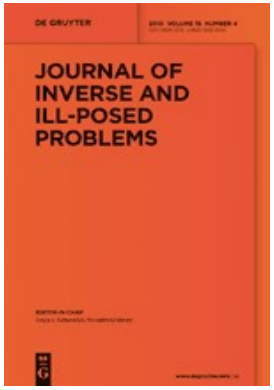
Welcome
to the 11th International Conference Inverse Problems: Modeling and Simulation
May 26 - June 01, 2024, Paradise Bay Resort Hotel, Malta

The First International Conference Inverse Problems: Modeling and Simulation (sponsors: by Fethiye Municipality, Office of Naval Research International Field Office and Naval Undersea Warfare Center (USA), Danish Interdisciplinary Inversion Group) was held on July 14-21, 2002 in Fethiye, Turkey. It was one of the first major international meetings on inverse problems.
The Second International Conference "Inverse Problems: Modeling and Simulation was held on June 07 – 12, 2004 in Fethiye, Turkey. Sponsors: Fethiye Municipality, journals Inverse Problems', Journal of Inverse and Ill-Posed Problems', Inverse Problems in Engineering', TUBITAK.
The Third International Conference Inverse Problems: Modeling and Simulation was held on May 29 – June 02, 2006 in Oludeniz - Fethiye, Mugla, Turkey. Sponsors Mugla Governorship, TUBITAK, Öludeniz Municipality, international journals Inverse Problems, Journal of Inverse and Ill-Posed Problems, Inverse Problems in Science and Engineering.'
The Fourth International Conference Inverse Problems: Modeling and Simulation was held on May 26 -30, 2008 in Öludeniz-Fethiye. Sponsors the Turkish International Cooperation and Development Agency (TIKA), Mugla Governorship, Ankara Branch of Turkish Mathematical Society, Oludeniz Municipality, international journals mentioned above.
The Fifth and Sixth International Conferences Inverse Problems: Modeling and Simulation were held on May 24-29, 2010, and May 21-26, 2012, respectively, at the Lykia World Antalya Hotel, Turkey. Both conferences were held under the auspices of the organizations mentioned above.
The Seventh International Conference Inverse Problems: Modeling and Simulation was held on May 26-31, 2014 at the Liberty Hotels Lykia, Öludeniz-Fethiye, Turkey. The meeting was supported by the Scientific and Technological Research Council of Turkey (TUBITAK).
The Eighth International Conference Inverse Problems: Modeling and Simulation was held on May 23-28, 2016 at the Liberty Hotels, Lykia, Ölüdeniz, Fethiye - Turkey. The main sponsors of the conference were Izmir University, École Polytechnique and the Eurasian Association on Inverse Problems (EAIP).
The Ninth International Conference Inverse Problems: Modeling and Simulation was held during on May 21-25, 2018 at the Paradise Bay Resort Hotel, Mellieha, Malta. The conference brought together over 250 experts on inverse problems and applications from 32 countries. The main sponsor of the conference was The Eurasian Association on Inverse Problems (http://www.eurasianip.org).
The Tenth International Conference Inverse Problems: Modeling and Simulation was held on May 22–28, 2022 in Malta, at the Paradise-Bay Resort Hotel. In addition to being a jubilee conference in and of itself, this conference honored the jubilees of several eminent experts on inverse problems from around the globe. This conference, as with the previous two conferences, has been organized under the auspices of the Eurasian Association on Inverse Problems.

The Eleventh International Conference Inverse Problems: Modeling and Simulation, will take place from May 26 to June 01, 2024 at the Paradise Bay Resort Hotel, Malta. The Eurasian Association on Inverse Problems is the principal sponsor of this conference.

Organizing Institution and Sponsors



Main Topics

- Inverse Problems in: Tomography; Medical Imaging; Mechanics; Nondestructive Testing; Material Science; Underground Prospecting; Acoustics; Geosciences; Heat and Mass Transfer; Chemistry, Biology, Medicine, Economics and Life Sciences; Electromagnetism; Theory of Solitons; Learning Theory
- Imaging
- Regularization Techniques
- Statistical and Probabilistic Methods
- Bayesian Techniques for Inverse Problems in Stochastic PDEs
- Numerical Inversion Algorithms
- Inverse and Control Problems for Differential Equations and Variational Inequalities
- Geometric Inverse Problems
- Radon Transforms and Integral Geometry
- Convex Analysis and Inverse Problems
- Inverse Problems and Signal Processing
- Identification and Shape Optimization in Vibration Structures
- Inverse Scattering Wave Propogation
- Determination of Boundary and Initial Conditions
- Computational Methods and Identifiability Concepts
- Spectral Inversion
- Inverse Problems with Data-Driven Methods and Deep Learning

Committees

Chair of the Conference: Alemdar Hasanov Hasanoglu, Turkey

Co-Chairs: Roman Novikov, France; Eric Todd Quinto, USA; Otmar Scherzer, Austria; Cristiana Sebu, Malta

International Program Committee:

- Simon Arridge, UK
- Giovanni S. Alberti, Italy
- Laurent Baratchart, France
- Jin Cheng, China
- Thorsten Hohage, Germany
- Hiromichi Itou, Japan
- Sergey I. Kabanikhin, Russia
- Barbara Kaltenbacher, Austria
- Leonid Kunyansky, USA
- Mikko Salo, Finland

International Organizing Committee:

- Onur Baysal, Malta
- Karel Van Bockstal, Belgium
- Alexandre Jollivet, France
- Alexandre Kawano, Brazil
- Burhan Pektas, Turkey
- Yanica Said, Malta
- Cristiana Sebu, Malta (Chair)

CONFERENCE PROGRAMME OUTLINE

REGISTRATION: Paradise Bay Resort Hotel Reception Hall

SUNDAY, May 26, 2024, 10:00-19:00
MONDAY, May 27, 2024, 08:00-10:00

MONDAY, May 27, 2024

10:00-10:35	**Opening Ceremony & Award Presentation** (Amphitheatre)			
10:40-11:20	**PLENARY SESSION** (Salon A) **Chair:** Andrea Aspri			
11:20-11:40	**Coffee Break**			
	MINISYMPOSIUMS **(Sessions consist of four 25-minute presentations.)**			
	Salon A	**Salon B**	**Salon C**	**Salon D**
11:40-13:20	**M1: The Radon Transform: Progress and Challenges** *Minisymposium dedicated to Professor Jan Boman* Organizers: P. Kurasov, R. Novikov, E.T. Quinto **Session 1**	**M10: Inverse and Control Problems for Evolution Equations and Variational Inequalities** Organizer: M. Slodička **Session 1**	**M4: New Trends in Regularization Theory** Organizers: S. Kindermann, R. Plato, B. Hofmann **Session 1**	**M12: Applied Inverse Problems and Partial Differential Equations** Organizers: K. Van Bockstal, M. Ruzhansky, B. Torebek **Session 1**
13:20-14:30	**Lunch**			
14:30-16:10	**M1** (Continued) **Session 2**	**M10** (Continued) **Session 2**	**M4** (Continued) **Session 2**	**M12** (Continued) **Session 2**
16:10-16:30	**Coffee Break**			
16:30-18:35	**M2: Microlocal Analysis and Waves: Progress and Challenges** Organizers: R. Ramlau, E.T. Quinto, K. Sadiq, O. Scherzer **Session 1**	**M17: In Memoriam: Professor Pierre Célestin Sabatier (1935-2023)** Organizer: C. Sebu **Session 1**	**M16: Inverse Problem Theory for Innovation of Detection Methods** Organizers: H. Itou, V. Kovtunenko, Y. Kian **Session 1**	**M12** (Continued) **Session 3**
19:30-20:30	**Welcome Party**			

	TUESDAY, May 28, 2024			
09:00-09:40	**PLENARY SESSION** (Salon A) **Chair**: Yikan Liu			
	MINISYMPOSIUMS			
	Salon A	**Salon B**	**Salon C**	**Salon D**
09:50-11:30	**M2: Microlocal Analysis and Waves: Progress and Challenges** (Continued) Organizers: R. Ramlau, E.T. Quinto, K. Sadiq, O. Scherzer **Session 2**	**M17: In Memoriam: Professor Pierre Célestin Sabatier (1935-2023)** (Continued) Organizer: C. Sebu **Session 2**	**M4: New Trends in Regularization Theory** (Continued) Organizers: S. Kindermann, R. Plato, B. Hofmann **Session 3**	**M12: Applied Inverse Problems and Partial Differential Equations** (Continued) Organizers: K. Van Bockstal, M. Ruzhansky, B. Torebek **Session 4**
11:30-11:50	**Coffee Break**			
11:50-13:30	**M2** (Continued) **Session 3**	**M17** (Continued) **Session 3**	**M5: Inverse Problems in Hybrid Imaging Modalities** Organizers: S. Arridge, L. Kunyansky **Session 1**	**M12** (Continued) **Session 5**
13:30-15:00	**Lunch**			
15:00-16:40	**M2** (Continued) **Session 4**	**M11: Image Restoration Under Poisson Noise** Organizers: F. Benvenuto, Y. Lou, F. Werner **Session 1**	**M14: Recent Advances in Inverse Scattering Theory and Applications** Organizers: T. Hohage, S. Meng, R. Novikov **Session 1**	**M15: Imaging with Waves in Complex Media** Organizers: A. Kim, C. Tsogka **Session 1**
16:40-17:00	**Coffee Break**			
17:00-18:40	**M16: Inverse Problem Theory for Innovation of Detection Methods** (Continued) Organizers: H. Itou, V. Kovtunenko, Y. Kian **Session 2**	**M11** (Continued) **Session 2**		**M15** (Continued) **Session 2**
19:00-19:30	**Biennial Assembly of the Eurasian Association on Inverse Problems (Salon A)**			

	WEDNESDAY, May 29, 2024
	Excursions
10:00-17:00	**Round Malta Boat Tour** This tour includes open bar all day for water, soft drinks and juice, morning snack, cold buffet lunch including beer and wine, fresh fruits, English commentary and a stop for swimming (departure from the hotel at 9:30).
09:30-17:30	**Malta City Sightseeing Tour** This tour includes visits of Valletta, St. John's Co-Cathedral, Mdina and time-permitting a small stop for swimming or a short boat tour at the Blue Grotto.
	Each of these excursions costs 55 euros per person. This fee must be paid to the conference assistant at the registration desk a few days before the tours begin.

	THURSDAY, May 30 2024			
09:00-09:40	**PLENARY SESSION** (Salon A) **Chair**: Yi-Hsuan Lin			
	MINISYMPOSIUMS			
	Salon A	**Salon B**	**Salon C**	**Salon D**
09:50-11:30	**M9: Inverse Problems for Fractional Equations** Organizers: G. Covi, B. Kaltenbacher, M. Salo **Session 1**	**M8: Inverse Problems with Data-Driven Methods and Deep Learning** Organizers: T. Bubba, A. Hauptmann, L. Ratti **Session 1**	**M14: Recent Advances in Inverse Scattering Theory and Applications** (Continued) Organizers: T. Hohage, S. Meng, R. Novikov **Session 2**	**M7: Bayesian, Variational, and Optimization Techniques for Inverse Problems in Stochastic PDEs** Organizers: B. Kaltenbacher, A. Khan, H.J. Starkloff, C. Tammer **Session 1**
11:30-11:50	**Coffee Break**			
11:50-13:30	**M9** (Continued) **Session 2**	**M8** (Continued) **Session 2**	**M14** (Continued) **Session 3**	**M7** (Continued) **Session 2**
13:30-15:00	**Lunch**			
15:00-16:40	**M3: Inverse and Control Problems in Vibrating Structures: Theory, Applications and Computational Aspects** Organizers: O. Baysal, A. Kawano, A. Morassi **Session 1**	**M6: Topological Derivatives in Inverse Problems and Shape Optimization** Organizers: P. Gangl, M.-L. Rapún **Session 1**	**M5: Inverse Problems in Hybrid Imaging Modalities** (Continued) Organizers: S. Arridge, L. Kunyansky **Session 2**	**M7** (Continued) **Session 3**
16:40-17:00	**Coffee Break**			
17:00-18:40	**M3** (Continued) **Session 2**	**M6** (Continued) **Session 2**		
20:00-24:00	**Banquet**			

	FRIDAY, May 31, 2024			
09:00-09:40	**PLENARY SESSION** (Salon A) **Chair**: Sebastian Neumayer			
	MINISYMPOSIUMS			
	Salon A	**Salon B**	**Salon C**	**Salon D**
09:50-11:30	**M9: Inverse Problems for Fractional Equations** (Continued) Organizers: G. Covi, B. Kaltenbacher, M. Salo **Session 3**	**M13: Applications of Rich Tomography** Organizers: S. Holman W.R.B. Lionheart **Session 1**	**M10: Inverse and Control Problems for Evolution Equations and Variational Inequalities** (Continued) Organizer: M. Slodička **Session 3**	**M7: Bayesian, Variational, and Optimization Techniques for Inverse Problems in Stochastic PDEs** (Continued) Organizers: B. Kaltenbacher, A. Khan, H.J. Starkloff, C. Tammer **Session 4**
11:30-11:50	**Coffee Break**			
11:50-13:30	**M8: Inverse Problems with Data-Driven Methods and Deep Learning** (Continued) Organizers: T. Bubba, A. Hauptmann, L. Ratti **Session 3**	**M13** (Continued) **Session 2**	**M10** (Continued) **Session 4**	**M7** (Continued) **Session 5**
13:30-15:00	**Lunch**			
15:00-16:40	**M8** (Continued) **Session 4**		**M3: Inverse and Control Problems in Vibrating Structures: Theory, Applications and Computational Aspects** (Continued) Organizers: O. Baysal, A. Kawano, A. Morassi **Session 3**	
16:40-17:00	**Coffee Break**			
18:50-19:20	**Closing Ceremony. Election of Committee Members for IPMS 2026 (Salon A)**			

CONFERENCE PROGRAMME

MONDAY, May 27, 2024

PLENARY SESSION (Salon A)
Chair: Andrea Aspri

10:40-11:20	**Chrysoula Tsogka**, Professor of Mathematics, University of California, Merced, USA, ctsogka@ucmerced.edu *Correlation-informed ordered dictionary learning for imaging in complex media*
11:20-11:40	**Coffee Break**

MINISYMPOSIUMS

M1: The Radon Transform: Progress and Challenges Chairs: P. Kurasov, R. Novikov, E.T. Quinto **Session 1** (11:40-13:20)	**M10: Inverse and Control Problems for Evolution Equations and Variational Inequalities** Chair: M. Slodička **Session 1** (11:40-13:20)	**M4: New Trends in Regularization Theory** Chairs: S. Kindermann, R. Plato **Session 1** (11:40-13:20)	**M12: Applied Inverse Problems and Partial Differential Equations** Chairs: K. Van Bockstal, D. Lesnic **Session 1** (11:40-13:20)
Salon A	**Salon B**	**Salon C**	**Salon D**
F. Alberto Grünbaum, *University of California, Berkeley, USA, A path from "limited angle tomography" through the prolate spheroidals to the Riemann zeta function* (11:40-12:05)	Andrea Aspri, University of Milan, Italy, *Identification of cavities in a nonlinear model arising from electrophysiology* (11:40-12:05)	Barbara Kaltenbacher, University of Klagenfurt, Austria, *Convergence guarantees for tomographic applications via the range invariance condition* (11:40-12:05)	Arran Fernandez, Eastern Mediterranean University, Northern Cyprus, Turkey, *Mikusinski's Operational Calculus: Algebraic inversion to solve fractional PDEs* (11:40-12:05)
Mark Agranovsky, Bar-Ilan University, Israel, *Domains with algebraic Radon transforms* (12:05-12:30)	Alexandra Smirnova, Georgia State University, USA, *Parameter estimation and optimal control in epidemiology* (12:05-12:30)	Ronny Ramlau, Johannes Kepler University Linz, Austria, *Non-uniqueness and reconstructability for the atmospheric tomography problem* (12:05-12:30)	Ravshan Ashurov, Institute of Mathematics, Uzb. Academy of Sciences, Uzbekistan, *Inverse problem for the subdiffusion equation with fractional Caputo derivative* (12:05-12:30)
Leonid Kunyansky, University of Arizona, *Range description for the free space wave operator* (12:30-12:55)	Michel Cristofol, Aix Marseille Université, France, *Stability estimates for some coefficients in a quantitative thermo-acoustic-tomography model by partial boundary data* (12:30-12:55)	Simon Hubmer, RICAM, Austria, *On phase unwrapping via digital wavefront sensors* (12:30-12:55)	Karel Van Bockstal, Ghent University, Belgium, *The reconstruction of a time-dependent source in the time-fractional subdiffusion equation with time-dependent piecewise constant order* (12:30-12:55)
Rolf Clackdoyle, Université Grenoble Alpes, *France, A medley of range conditions for divergent beam transforms* (12:55-13:20)	Frederick Maes, Ghent University, Belgium, *Determining a space-dependent source in thermoelastic systems* (12:55-13:20)	Tram Nguyen, Max-Planck Institute for Solar System Research, Germany, *Bi-level iterative regularization for inverse problems in nonlinear PDEs* (12:55-13:20)	Khonatbek Khompysh, Al-Farabi Kazakh National University, Kazakhstan, *Inverse problems for pseudoparabolic equations with fractional time derivative* (12:55-13:20)

13:20-14:30	Lunch		
Salon A	**Salon B**	**Salon C**	**Salon D**
M1 (Continued) Chairs: R. Novikov, E.T. Quinto **Session 2** (14:30-16:10)	**M10** (Continued) Chairs: M. Slodička, A. Smirnova **Session 2** (14:30-16:10)	**M4** (Continued) Chairs: S. Kindermann, R. Plato **Session 2** (14:30-16:10)	**M12** (Continued) Chairs: K. Van Bockstal, D. Lesnic **Session 2** (14:30-16:10)
Roman Novikov, Ecole Polytechnique, France, *PSWF-Radon approach to super-resolution in multidimensional Fourier analysis* (14:30-14:55)	Jaan Janno, Tallinn University of Technology, Estonia, *Inverse problems for simultaneous determination of source terms and several scalar parameters of fractional diffusion-wave equations* (14:30-14:55)	Elena Resmerita, University of Klagenfurt, Austria, *Applications of multiscale hierarchical decomposition to blind deconvolution* (14:30-14:55)	Daniel Lesnic, University of Leeds, UK, *Determination of the time-dependent blood perfusion coefficient in the thermal-wave model of bio-heat transfer* (14:30-14:55)
Mikko Salo, University of Jyvaskyla, Finland, *Analytic double fibration transforms* (14:55-15:20)	Souvik Roy, University of Texas, Arlington, USA, *Inverse problems related to a Fokker-Planck control framework in esophageal cancer* (14:55-15:20)	Marek Kojdecki, Military University of Technology, Poland, *Discrepancy principles as parameter choice rules in Tikhonov regularization* (14:55-15:20)	Mostafa Meliani, Radboud University, Netherlands, *Analysis of wave equations describing ultrasound propagation in complex media* (14:55-15:20)
Aleksander Denisiuk, University of Warmia and Mazury in Olsztyn, Poland, *Iterative inversion of the momentum x-ray transform of tensor fields* (15:20-15:45)	Sebastian Scott, University of Bath, UK, *On optimal regularisation parameters via bilevel learning* (15:20-15:45)	Richard Schmähl, University of Stuttgart, Germany, *Regularization of inverse problems based on diffusion processes* (15:20-15:45)	Björn Müller, Max-Planck-Institute for Solar System Research, Germany, *Unique identifiability of a passive inverse parameter problem: The example of helioseismology* (15:20-15:45)
Richard Huber, Université Grenoble Alpes, France, *The range of projection pair operators* (15:45-16:10)	Soumen Senapati, RICAM, Austria, *Stability estimates of time-dependent coefficients for some hyperbolic inverse problems* (15:45-16:10)	Christian Wald, Technical University of Berlin, Germany, *Generative modeling for regularization* (15:45-16:10)	Bolatbek Rysbaiuly, International IT University, Kazakhstan, *Nonlinear inverse problem of moisture transfer in the soil* (15:45-16:10)
16:10-16:30	**Coffee Break**		
M2: Microlocal Analysis and Waves: Progress and Challenges Chairs: R. Ramlau, E.T. Quinto, K. Sadiq, O. Scherzer **Session 1** (16:30-17:45)	**M17: In Memoriam: Professor Pierre Célestin Sabatier (1935-2023)** Chair: C. Sebu **Session 1** (16:30-18:10)	**M16: Inverse Problem Theory for Innovation of Detection Methods** Chairs: H. Itou, V. Kovtunenko **Session 1** (16:30-18:35)	**M12** (Continued) Chairs: K. Van Bockstal, D. Lesnic **Session 3** (16:30-18:35)
Tanja Tarvainen, University of Eastern Finland, *Single-stage approach for estimating optical parameters in spectral quantitative photoacoustic tomography* (16:30-16:55)	Jean-Guy Caputo, National Institute of Applied Sciences of Rouen, France, *Detection—identification of disturbances in transmission networks* (16:30-16:55)	Mikyoung Lim, Korea Advanced Inst. of Sci. and Tech. (KAIST), Republic of Korea, *Spectral analysis of the Neumann–Poincaré operator on touching disks* (16:30-16:55)	Dmitrii Chaikovskii, Shenzhen MSU-BIT University, P.R. China, *Real-time solutions of source inverse problems using the asymptotic expansions* (16:30-16:55)

Sean Holman, The University of Manchester, UK, *Boundary recovery for the anisotropic Maxwell's equations* (16:55-17:20)	Christine De Mol, Université Libre de Bruxelles, Belgium, *Quantum-inspired classification algorithms* (16:55-17:20)	Takaaki Nara, The University of Tokyo, Japan, *Identification of the number of dipoles for a biomagnetic inverse problem based on a reproducing kernel* (16:55-17:20)	Pardeep Kumar, Indian Institute of Technology Roorkee, India, *An inverse source problem for convective Brinkman -Forchheimer eqs with the final overdetermination* (16:55-17:20)
Kamran Sadiq, RICAM, Austria, *On a source reconstruction in an absorbing and scattering planar domain from partial boundary data* (17:20-17:45)	Sergio Vessella, University of Florence, Italy, *A strong unique continuation property for the wave equation* (17:20-17:45)	Jérémy Heleine, Paul Sabatier University (Toulouse 3), France, *An iterated sensitivity equation to reconstruct perturbations with microwave imaging* (17:20-17:45)	Pranav Kumar, Indian Inst. of Science Education and Research (IISERs), India, *Local data inverse problem for the polyharmonic operator with anisotropic peturbations* (17:20-17:45)
	Thorsten Hohage, University of Göttingen, Germany, *Passive inverse obstacle scattering problems* 17:45-18:10)	Yikan Liu, Kyoto University, Japan, *Unique determination and numerical reconstruction of orders in coupled time-fractional diffusion equations* (17:45-18:10)	James Webber, Brigham and Women's Hospital, USA, *Surface of revolution Radon transforms with centers on generalized surfaces in R^n* (17:45-18:10)
		Giuseppe Floridia, Sapienza Univeristy of Rome, Italy, *Carleman estimates and inverse problems for first-order hyperbolic equations* (18:10-18:35)	Aizhan Ydyrys, International IT University, Kazakhstan, *The inverse problem of thermal conductivity in a curved region* (18:10-18:35)

TUESDAY, May 28, 2024

PLENARY SESSION (Salon A)
Chair: Yikan Liu

09:00-09:40 **Florian Faucher,** INRIA Bordeaux, University of Pau and Pays de l'Adour, France
Numerical inverse wave problems for quantitative visco-elastic reconstructions

MINISYMPOSIUMS

Salon A	Salon B	Salon C	Salon D
M2: Microlocal Analysis and Waves: Progress and Challenges (Continued) Chairs: R. Ramlau, E.T. Quinto, K. Sadiq, O. Scherzer **Session 2** (09:50-11:30)	**M17: In Memoriam: Professor Pierre Célestin Sabatier (1935-2023)** Chairs: C. Sebu, C. De Mol (Continued) **Session 2** (09:50-11:30)	**M4: New Trends in Regularization Theory** (Continued) Chairs: S. Kindermann, R. Plato **Session 3** (09:50-11:30)	**M12: Applied Inverse Problems and Partial Differential Equations** (Continued) Chairs: K. Van Bockstal, D. Lesnic **Session 4** (09:50-11:30)

Yakun Dong, University of Vienna, Austria, *Inverse scattering problems with internal sources* (09:50-10:15)	Jan Boman, Stockholm University, Sweden, *The interior problem for the Radon transform* (09:50-10:15)	Frank Werner, University of Würzburg, Germany, *Optimal regularized hypothesis testing in statistical inverse problem* (09:50-10:15)	Marat Tleubergenov, Institute of Mathematics and Mathematical Modelling, Kazakhstan, *Inverse problems of dynamics in the presence of random perturbations* (09:50-10:15)
Noemi Naujoks, University of Vienna, Austria, *Object reconstruction in diffraction tomography using focused beams* (10:15-10:40)	F. Alberto Grünbaum, University of California, Berkeley, USA, *Higher order correlations in X-ray crystallography and Cosmology: the abelian and the nonabelian case* (10:15-10:40)	Richard Spencer, National Institute on Aging, USA, *Myelin mapping in the human brain using an empirical extension of the ridge regression theorem* (10:15-10:40)	Mihaela Pricop-Jeckstadt, POLITEHNICA University of Bucharest, Romania, *Linear statistical inverse problems for Hilbert space processes in Hilbert Scales* (10:15-10:40)
Michael Quellmalz, TU Berlin, Germany, *Motion detection in diffraction tomography* (10:40-11:05)	Roman Novikov, Ecole Polytechnique, France, *Transparent scatterers and transmission eigenvalues* (10:40-11:05)	Andrea Ebner, University of Innsbruck, Austria, *Regularization with non-linear frame filtering* (10:40-11:05)	Anwesa Dey, University of Utah, USA, *A convolutional neural network-based reconstruction framework in magnetic resonance* (10:40-11:05)
Bochra Mejri, RICAM, Austria, *Vertices classification with topological gradient* (11:05-11:30)	Cristiana Sebu, University of Malta, Malta, *Recent developments in Electrical Impedance Mammography* (11:05-11:30)	Tobias Wolf, University of Klagenfurt, Austria, *Solving decomposition problems with nested Bregman iterations* (11:05-11:30)	Jorge Vicente, Universitat Autònoma de Barcelona, Spain, *A linear data completion problem in Inverse electrocardiography* (11:05-11:30)
11:30-11:50	**Coffee Break**		
M2 (Continued) Chairs: R. Ramlau, E.T. Quinto, K. Sadiq, O. Scherzer **Session 3** (11:50-13:30)	**M17** (Continued) Chairs: C. Sebu, S. Vessella **Session 3** (11:50-13:30)	**M5: Inverse Problems in Hybrid Imaging Modalities** Chairs: S. Arridge, L. Kunyansky **Session 1** (11:50-13:30)	**M12** (Continued) Chairs: K. Van Bockstal, D. Lesnic **Session 5** (11:50-13:30)
Salon A	**Salon B**	**Salon C**	**Salon D**
Leopold Veselka, University of Vienna, Austria, *Quantification of optical parameters in optical coherence tomography* (11:50-12:15)	Lassi Paivarinta, Tallinn University of Technology, Estonia, *Inverse problems for screens* (11:50-12:15)	Otmar Scherzer, University of Vienna, Austria, *Mathematical imaging by optical coherence and photoacoustic tomography* (11:50-12:15)	Ye Zhang, Shenzhen MSU-BIT University, P.R. China, *Inverse Cauchy problems: revisit and a new approach* (11:50-12:15)
Simon Hackl, RICAM, Austria, *Ultrasound aberration correction for layered media* (12:15-12:40)	Luca Rondi, University of Pavia, Italy, *Fully discretized reconstruction for the inverse conductivity problem* (12:15-12:40)	Peter Elbau, University of Vienna, Austria, *Quantitative reconstruction for optical coherence tomography* (12:15-12:40)	Irina Melnikova, Ural Federal University, Russia, *Regularization of Ill-posed stochastic problems* (12:15-12:40)

Huidong Yang, University of Vienna, Austria, *Interface identification and sound speed reconstruction in layered media using acoustic wave* (12:40-13:05)	Andrej Brojatsch, University of Frankfurt, Germany, *Calculating the number of electrodes for uniqueness and global convergence in an inverse coefficient problem* (12:40-13:05)	Andreas Hauptmann, University of Oulu, Finland, *Learned iterative reconstructions in photoacoustic tomography for the acoustic and optical problem* (12:40-13:05)	Murat Sultanov, Int. Kazakh-Turkish Univ. Khoja Ahmed Yasavi, Kazakhstan, *Num. meth. for solving the initial bound. problems for subdiffusion eq.s with nonl. boundary conditions* (12:40-13:05)
Swaraj Paul, SRM Institute of Science and Technology, India, *Microlocal analysis using shearlets* (13:05-13:30)	Pierre Maréchal, Université Paul Sabatier, Toulouse, France, *Regularization of the inverse Laplace transform by mollification* (13:05-13:30)	Niko Hänninen, University of Eastern Finland, *Estimating optical parameters in quantitative photoacoustic tomography utilizing Monte Carlo method for light transport* (13:05-13:30)	Haie Long, Shenzhen MSU-BIT Univ., P.R: China, *An accelerated inexact Newton regularization scheme with a learned feature-selection rule for non-linear inverse problems* (13:05-13:30)
13:30-15:00	**Lunch**		
M2 (Continued) Chairs: R. Ramlau, E.T. Quinto, K. Sadiq, O. Scherzer **Session 4** (15:00-16:15)	**M11: Image Restoration Under Poisson Noise** Chairs: F. Benvenuto, F. Werner **Session 1** (15:00-16:40)	**M14: Recent Advances in Inverse Scattering Theory and Applications** Chair: T. Hohage, R. Novikov **Session 1** (15:00-16:40)	**M15: Imaging with Waves in Complex Media** Chairs: A. Kim, C. Tsogka Session 1 (15:00-16:40)
Salon A	**Salon B**	**Salon C**	**Salon D**
Suman Kumar Sahoo, ETH Zurich, Switzerland, *Kernel description of the momentum ray transforms* (15:00-15:25)	Monica Pragliola, University of Naples Federico II, Italy, *Whiteness-based parameter selection for Poisson data in variational image processing* (15:00-15:25)	Eulogy for Professor Alexei Iantchenko, Malmö University, Sweden (15:00-15:25)	Arnold Kim, University of California, Merced, USA, *Ground-penetrating synthetic aperture radar imaging of dispersive targets* (15:00-15:25)
Jian Zhai, Fudan University, P.R. China, *Inverting the local geodesic transverse and mixed ray transforms* (15:25-15:50)	Paolo Massa, University of Applied Sciences and Arts Northwestern Switzerland, Switzerland, *Predictive risk estimation for inverse problems with Poisson data* (15:25-15:50)	Elena Cherkaev, The University of Utah, USA, *Inverse scattering problem for dissipative equations* (15:25-15:50)	Laure Giovangigli, ENSTA-Paris, Institut Polytechnique de Paris, France, *Estimation of the effective sound speed in an acoustic medium* (15:25-15:50)
Lukas Weissinger, RICAM, Austria, *An inverse problems approach to pulse wave analysis in the human brain* (15:50-16:15)	Germana Landi, University of Bologna, Italy, *The Balancing Principle for automatic restoration of Poissonian images* (15:50-16:15)	Vladimir Druskin, Worcester Polytechnic Institute, USA, *Data-driven computation of the interior solutions for inverse scattering problems and beyond* (15:50-16:15)	Miguel Moscoso, Universidad Carlos III de Madrid, Spain, *Phase and absorption contrast imaging* (15:50-16:15)
	Zbigniew Szkutnik, AGH-University of Science and Technology, Poland, *Weighted discrepancy principle and adaptivity in Poisson inverse problems* (16:15-16:40)	Marvin Knöller, Karlsruhe Institute of Technology, Germany, *The temporal domain derivative and an application in inverse acoustic scattering* (16:15-16:40)	Knut Solna, University of California at Irvine, USA, *Source imaging through a complex section* (16:15-16:40)

16:40-17:00	Coffee Break		
M16: Inverse Problem Theory for Innovation of Detection Methods (Continued) Chairs: H. Itou, V. Kovtunenko **Session 2** (17:00-18:40)	**M11** (Continued) Chairs: F. Benvenuto, F. Werner **Session 2** (17:00-18:15)		**M15** (Continued) Chairs: A. Kim, C. Tsogka **Session 2** (17:00-19:05)
Salon A	**Salon B**	**Salon C**	**Salon D**
Gen Nakamura, Hokkaido University, Japan, Analysis for viscoelastic models (17:00-17:25)	Huibin Chang, Tianjin Normal University, P.R. China, *Bilinear decomposition based splitting algorithms for curvature driven image restoration* (17:00-17:25)		Maria-Antonia Maisto, Università della Campania, Italy, *Near field sampling and resolution in linear inverse scattering problems* (17:00-17:25)
Hiroshi Takase, Kyushu University, Japan, *Global Lipschitz stability for inverse problems of waves on Lorentzian manifolds* (17:25-17:50)	Alessandro Lanza, University of Bologna, Italy, *Novel criteria for automatic solution of inverse problems under low photon-count Poisson noise corruption* (17:25-17:50)		Pedro González-Rodríguez, University Carlos III de Madrid, Spain, *Inverse problems with anomalous diffusion* (17:25-17:50)
Ryusei Yamashita, Tokyo Metropolitan University, Japan, *A remark on the reconstruction formula of the support function for the magnetic Schrödinger operator* (17:50-18:15)	Voichita Maxim, CREATIS, INSA de Lyon, France, *Pre-conditioned dual algorithm for TV regularization in Compton camera image reconstruction* (17:50-18:15)		Alexei Novikov, Penn State University, USA, *Dictionary learning for imaging in complex media* (17:50-18:15)
Hiromichi Itou, Tokyo University of Science, Japan, *On inverse and forward problems of some viscoelastic models* (18:15-18:40)			Symeon Papadimitropoulos, University of California, Merced, USA, *Synthetic aperture imaging using physically informed convolutional networks* (18:15-18:40)
			Mohamed Aziz Boukraa, Institut Polytechnique de Paris, France, *Seismic imaging of dam-rock interface using full-waveform inversion* (18:40-19:05)
19:00-19:30	**Biennial Assembly of the Eurasian Association on Inverse Problems (Salon A)**		

THURSDAY, May 30, 2024			
PLENARY SESSION (Salon A) **Chair**: Yi-Hsuan Lin			
09:00-09:40	**Vladislav V. Kravchenko,** Center for Research and Advanced Studies of the National Polytechnic Institute, Queretaro, Mexico *New series representations and reconstruction techniques in inverse coefficient problems*		
MINISYMPOSIUMS			
M9: Inverse Problems for Fractional Equations Chairs: G. Covi, B. Kaltenbacher, M. Salo **Session 1** (09:50-11:30)	**M8: Inverse Problems with Data-Driven Methods and Deep Learning** Chairs: A. Hauptmann, L. Ratti **Session 1** (09:50-11:30)	**M14: Recent Advances in Inverse Scattering Theory and Applications** (Continued) Chairs: E. Cherkaev, R. Novikov **Session 2** (09:50-11:30)	**M7: Bayesian, Variational, and Optimization Techniques for Inverse Problems in Stochastic PDEs** Chairs: A. Khan, H.J. Starkloff, C. Tammer **Session 1** (09:50-11:30)
Salon A	**Salon B**	**Salon C**	**Salon D**
Angkana Rüland, University of Bonn, Germany, *On the fractional Calderón problem* (09:50-10:15)	Tan Bui-Thanh, University of Texas, USA, *Model-constrained uncertainty quantification of SciML for inverse problems* (09:50-10:15)	Meng Liu, Max Planck Institute for Solar System Research, Germany, *Passive inverse scattering problems for the Helmholtz equation* (09:50-10:15)	Pablo Pedregal, Universidad de Castilla-La Mancha, Spain, *Inverse problems as a source for vector variational problems* (09:50-10:15)
William Rundell, Texas A&M University, USA, *Recovery of coefficients in parabolic and wave equations from time trace data* (10:15-10:40)	Robert Scheichl, University of Heidelberg, Germany, *Deep inverse Rosenblatt transport for Bayesian inverse problems* (10:15-10:40)	Xiaoli Liu, Beihang University, P.R. China, *An accelerated level set method for inverse scattering problems* (10:15-10:40)	Antonio Leaci, Università del Salento, Italy, *Textured image restoration via symmetrised fractional variation* (10:15-10:40)
Yi-Hsuan Lin, National Chiao Tung University, Taiwan, *Uniqueness results for fractional inverse problems* (10:40-11:05)	Dong Liu, University of Science and Technology of China, P.R. China, *Unsupervised neural networks for image reconstruction* (10:40-11:05)	Philipp Mickan, University of Gottingen, Germany, *Stability and instability for random inverse source problems* (10:40-11:05)	Taufiquar Khan, University of North Carolina at Charlotte, USA, *Optimal Bayesian inversion of absorption and scattering coefficients in DOT* (10:40-11:05)
Durvudkhan Suragan, Nazarbayev University, Kazakhstan, *Inverse coefficient problems for the heat equation with fractional Laplacian* (11:05-11:30)	Margaret Duff, Science and Technology Facilities Council – Rutherford Appleton Laboratories, UK, *VAEs with structured image covariance as priors to inverse imaging problems* (11:05-11:30)	Dmitry Ponomarev, Centre Inria d'Université Côte d'Azur, France, *Field extrapolation and denoising in the inverse magnetisation problem* (11:05-11:30)	Phuoc Truong Huynh, University of Klagenfurt, Austria, *Optimality of pulse energy for photoacoustic tomography* (11:05-11:30)
11:30-11:50	**Coffee Break**		

M9 (Continued) Chairs: G. Covi, M. Salo **Session 2** (11:50-13:05)	**M8** (Continued) Chairs: A. Hauptmann, L. Ratti **Session 2** (11:50-13:30)	**M14** (Continued) Chairs: V. Druskin, R. Novikov **Session 3** (11:50-12:40)	**M7** (Continued) Chairs: B. Kaltenbacher, A. Khan **Session 2** (11:50-13:30)
Salon A	**Salon B**	**Salon C**	**Salon D**
Tuhin Ghosh, Harish Chandra Research Institute, India, *A non-local inverse problem with boundary response* (11:50-12:15)	Marcello Carioni, University of Twente, The Netherlands, *Optimal transport methods for inverse problems regularization* (11:50-12:15)	Michael Zaslavsky, Southern Methodist University, USA, *Completed-data-driven ROMs for SAR imaging* (11:50-12:15)	Annamaria Barbagallo, University of Naples Federico II (UNINA), Italy, *A control economic equilibrium problem via inverse stochastic variational inequalities* (11:50-12:15)
Pu-Zhao Kow, National Taiwan University, Taiwan, *Inverse problems for some fractional equations with general non-linearity* (12:15-12:40)	Andreas Kofler, Physikalisch-Technische Bundesanstalt (PTB), Germany, *Learning spatio-temporal regularization parameter maps for TV-minimization-based image reconstruction* (12:15-12:40)	Jörn Zimmerling, Uppsala University, Sweden, *Reduced-order modeling approach to inverse scattering* (12:15-12:40)	Baasansuren Jadamba, Rochester Institute of Technology, *Computational framework for a distributed parameter identification in PDEs* (12:15-12:40)
Hendrik Baers, University of Bonn, Germany, *Instability results for the fractional Calderón problem* (12:40-13:05)	Subhadip Mukherjee, IIT Kharagpur, India, *Provably convergent plug-and-play quasi-Newton methods* (12:40-13:05)		Simona Bérešová, Institute of Geonics, Czech Academy of Sciences, Czech Republic, *Sampling in Bayesian inversion accelerated by surrogate models* (12:40-13:05)
Philipp Zimmermann, ETH Zurich, Switzerland, *An inverse problem for nonlocal porous medium equations with linear absorption term* (13:05-13:30)	Sebastian Neumayer, TU Chemnitz, Germany, *Learning spatially-adaptive regularization* (13:05-13:30)		Christian Aarset, University of Göttingen, Germany, *Optimal experimental design for correlation data in aeroacoustics* (13:05-13:30)
13:30-15:00	**Lunch**		
MINISYMPOSIUMS			
M3: Inverse and Control Problems in Vibrating Structures: Theory, Applications and Computational Aspects Chairs: O. Baysal, A. Kawano, **Session 1** (15:00-16:40)	**M6: Topological Derivatives in Inverse Problems and Shape Optimization** Chairs: A. Laurain, M.-L. Rapún **Session 1** (15:00-16:15)	**M5: Inverse Problems in Hybrid Imaging Modalities** (Continued) Chairs: S. Arridge, L. Kunyansky **Session 2** (15:00-16:40)	**M7** (Continued) Chairs: A. Khan, H.J. Starkloff **Session 3** (15:00-16:40)
Salon A	**Salon B**	**Salon C**	**Salon D**

Barbara Kaltenbacher, University of Klagenfurt, Austria, *Nonlinearity imaging in the frequency domain via multiharmonic expansions* (15:00-15:25)	Charles Dapogny, Université Grenoble Alpes, France, *Shape and topology optimization of regions supporting boundary conditions* (15:00-15:25)	Manabu Machida, Kindai University, Japan, *Optical tomography with the inverse Rytov series approximation* (15:00-15:25)	Hans-Jörg Starkloff, TU Bergakademie Freiberg, Germany, *Stochastic elliptic inverse problems as abstract elliptic inverse problems* (15:00-15:25)
Eva Sincich, Università degli Studi di Trieste, Italy, *A sixth order elliptic equation for nanoplates. Holder stability for a Winkler type coefficient* (15:25-15:50)	Won-Kwang Park, Kookmin University, Republic of Korea, *A study on the topological derivative-based imaging without background information* (15:25-15:50)	Kowar Richard, University of Innsbruck, Austria, *Fill-field photoacoustic tomography with variable sound speed and attenuation* (15:25-15:50)	Franco Tomarelli, Politecnico Di Milano, Italy, *Variational approach to pure traction and Signorini problem between linear and finite elasticity* (15:25-15:50)
Antonino Morassi, University of Udine, Italy, *Resonator-based mass detection in nanostructures* (15:50-16:15)	Victor Kovtunenko, University of Graz, Austria, *Lagrangian approach and shape gradient for inverse problem of breaking line identification in solid* (15:50-16:15)	Meghdoot Mozumder, University of Eastern Finland, Finland, *Diffuse optical tomography utilizing a nanosecond laser* (15:50-16:15)	Olalekan Babaniyi, Rochester Institute of Technology, USA, *Evaluating the accuracy of the posterior probability distribution in an elastic inverse problem* (15:50-16:15)
Salvatore Caddemi, University of Catania, Italy, *On the use of a roving harmonic load to locate cracks in shear deformable beam* (16:15-16:40)		Wei Li, DePaul University, USA, *Acousto-electric inverse source problems* (16:15-16:40)	Daniel Gendin, University at Buffalo, USA, *Uncertainty in inverse elasticity problems* (16:15-16:40)
16:40-17:00	**Coffee Break**		
M3 (Continued) Chairs: A. Kawano, A. Morassi **Session 2** (17:00-18:40)	**M6** (Continued) Chairs: C. Dapogny, V. Kovtunenko **Session 2** (17:00-17:50)		
Salon A	**Salon B**	**Salon C**	**Salon D**
Paolo Venini, University of Pavia, Italy, *Topology optimization of dynamic structures via singular value decomposition of the transfer matrix* (17:00-17:25)	Maria-Luisa Rapun, Universidad Politecnica de Madrid, Spain, *Iterative methods based on topological derivative computations for shape reconstruction problems* (17:00-17:25)		
Mourad Sini, RICAM, Austria, *Minnaert frequency and simultaneous reconstruction of the density, bulk and source in the time-domain wave equation* (17:25-17:50)	Antoine Laurain, University of Duisburg-Essen, Germany, *Reconstruction of Voronoi diagrams in inverse problems* (17:25-17:50)		

Sakthivel Kumarasamy, Indian Institute of Space Science and Technology, India, *Regularizing effect of the Kelvin-Voigt damping in the determination of shear force of the Euler-Bernoulli beam* (17:50-18:15)			
Alberto Mercado Saucedo, Federico Santa María Technical University, Chile, *Inverse problems for a wave equation with interface* (18:15-18:40)			

13:30-14:30 **Lunch**

FRIDAY, May 31, 2024

PLENARY SESSION (Salon A)
Chair: Sebastian Neumayer

09:00-09:40 **Pierre Weiss,** Toulouse Mathematics Institute, University of Toulouse, France
How artificial intelligence is changing Bayesian inversion in imaging?

MINISYMPOSIUMS

M9: Inverse Problems for Fractional Equations (Continued) Chairs: G. Covi, M. Salo **Session 3** (09:50-10:40)	**M13: Applications of Rich Tomography** Chairs: S. Holman, J. Railo **Session 1** (09:50-11:30)	**M10: Inverse and Control Problems for Evolution Equations and Variational Inequalities** (Continued) Chairs: J. Janno, M. Slodička **Session 3** (09:50-11:30)	**M7: Bayesian, Variational, and Optimization Techniques for Inverse Problems in Stochastic PDEs** (Continued) Chairs: A. Khan, C. Tammer **Session 4** (09:50-11:30)
Salon A	**Salon B**	**Salon C**	**Salon D**
Ting Wei, Lanzhou University, P.R. China, *Identification of multi-parameters in a time-fractional diffusion-wave equation* (09:50-10:15)	Margaret Duff, STFC – Rutherford Appleton Laboratories, UK, *Rich and Non-Rich Tomography - a multidisciplinary approach using the Core Imaging Library* (09:50-10:15)	Marian Slodička, Ghent University, Belgium, *Evolutionary PDEs with Volterra operators: direct and inverse source problems* (09:50-10:15)	Christiane Tammer, Martin-Luther-University of Halle-Wittenberg, Germany, *Multiobjective approaches for optimization problems under uncertainty* (09:50-10:15)
Giovanni Covi, University of Helsinki, Finland, *A reduction of the nonlocal Calderón problem to the local Calderón problem* (10:15-10:40)	William Robert Breckon Lionheart, The University of Manchester, UK, *Neutron strain topography* (10:15-10:40)	Anar Rahimov, Institute of Control Systems, Azerbaijan, *Numer. solution to an inverse problem of recovering source of a special type of parabolic equation* (10:15-10:40)	Ghada Alobaidi, American University of Sharjah, UAE, *Stochastic dynamics of influenza infection: Qualitative analysis and numerical results* (10:15-10:40)

	Amal M A Alghamdi, Technical University of Denmark, *Computational uncertainty quantification for inverse problems in Python (CUQIpy)* (10:40-11:05)	Mandeep Kumar, Indian Institute of Technology Jammu, India, *Stability of the determination of time-dependent coefficients of wave equation in infinite waveguide* (10:40-11:05)	Martin Eigel, Weierstrass Institute, Berlin, Germany, *Generative modelling with tensor compressed HJB approximations* (10:40-11:05)
	Shubham Ramkisan Jathar, Indian Institute of Science Education and Research (IISER), India, *Normal operators for momentum ray transforms* (11:05-11:30)	Filip Sroubek, Institute of Information Theory and Automation, Czech Republic, *Inverse problems in image processing* (11:05-11:30)	Jinlu Li, Shawnee State University, USA, *Frechet and Mordukhovich derivatives of the metric projection operator in Banach spaces* (11:05-11:30)
11:30-11:50	**Coffee Break**		
M8: Inverse Problems with Data-Driven Methods and Deep Learning Chairs: A. Hauptmann, L. Ratti (Continued) **Session 3** (11:50-13:30)	**M13** (Continued) Chairs: M. Duff, W.R.B. Lionheart **Session 2** (11:50-12:40)	**M10** (Continued) Chairs: M. Slodička, F. Sroubek **Session 3** (11:50-13:05)	**M7** (Continued) Chairs: A. Khan, C. Tammer **Session 5** (11:50-12:40)
Salon A	**Salon B**	**Salon C**	**Salon D**
Erich Kobler, University of Bonn, Germany, *Learning gradually non-convex image priors using score matching* (11:50-12:15)	Paul David Ledger, Keele University, UK, *Object characterisation and Bayesian classification in metal detection* (11:50-12:15)	Boris Martin, University of Liège, Belgium, *Efficient substructured domain-decomposition in inverse problems using Krylov subspace recycling* (11:50-12:15)	Miguel Sama, Universidad Nacional de Educación a Distancia, Spain, *Uncertainty quantification in residential thermal models* (11:50-12:15)
Johannes Hertrich, University College London, UK, *Generative sliced MMD flows for posterior sampling in Bayesian inverse problems* (12:15-12:40)	Jesse Railo, LUT University, Finland, *Magnetic and thermostatic nonabelian ray transforms* (12:15-12:40)	Eric Lindström, Chalmers University of Technology, Sweden, *Adaptive finite element method for electromagnetic coefficient inverse problem in conductive* media (12:15-12:40)	Akhtar A. Khan, Rochester Institute of Technology, USA, *Identification of random parameters in stochastic variational inequalities* (12:15-12:40)
Rémi Laumont, Technical University of Denmark, Denmark, *Bayesian computation with Plug-and-Play (PnP) priors for inverse problems in imaging sciences* (12:40-13:05)		Daurenbek Serikbaev, Ghent University, Belgium; Institute of Mathematics and Mathematical Modeling, Kazakhstan, *Inverse source problem for the time-fractional heat equation for positive operators* (12:40-13:05)	
Thomas Pinetz, Bonn University, Germany, *Blind single image super-resolution via iteratedshared prior learning* (13:05-13:30)			

13:30-15:00	**Lunch**		
M8 (Continued) Chairs: A. Hauptmann, L. Ratti **Session 4** (15:00-16:40)	**M3: Inverse and Control Problems in Vibrating Structures: Theory, Applications and Computational Aspects** (Continued) Chairs: A. Morassi, A. M. Saucedo **Session 3** (15:00-16:40)		
Johan S. Wind, University of Oslo, Norway, *Implicit regularization in diagonal linear networks* (15:00-15:25)	Alexandre Kawano, University of São Paulo, Brazil, *Identification of out-of-plane loads over Timoshenko beams* (15:00-15:25)		
Aslam Shaikh, Aalto University, Finland, *Specimen reconstruction in atom probe tomography as an inverse problem* (15:25-15:50)	Onur Baysal, University of Malta, Malta, *A new numerical approach for the determination of shear force in Atomic Force Microscopy* (15:25-15:50)		
Felix Herrmann, Georgia Institute of Technology, USA, *Neural wave-based imaging with amortized uncertainty quantification* (15:50-16:15)	Anjuna Dileep, Indian Institute of Space Science and Technology, India, *Simultaneous identification of spatial load and external heat source in thermoelastic plate* (15:50-16:15)		
Luca Ratti, University of Bologna, Italy, *Learned reconstruction methods for inverse problems: sample error estimates* (16:15-16:40)	Teresa Rauscher, University of Klagenfurt, Austria, *A paraxial approach for the inverse problem of vibroacoustic imaging in frequency domain* (16:15-16:40)		
16:40-17:00	**Coffee Break**		

17:20-18:00	**Closing Ceremony. Election of Committee Members for IPMS 2026 (Salon A)**