The 12th Conference Inverse Problems: Modeling and Simulation

May 31 – June 5, 2026, Malta

Conference Programme

CONFERENCE PROGRAMME

12th International Conference

Inverse Problems: Modeling and Simulation

(IPMS 2026)

held on May 31 – June 5, 2026, Paradise Bay Resort Hotel, Malta

http://www.ipms-conference.org

CONFERENCE PROGRAMME

TABLE of CONTENTS

General Information ..... ……3

Organizing Institution/Sponsors 4

Main Topics 5

Committees 6

Conference Program Outline 7

Plenary Sessions/ Minisymposiums

Monday, June 1, 2026 12

Tuesday, June 2, 2026 14

Wednesday, June 3, 2026 18

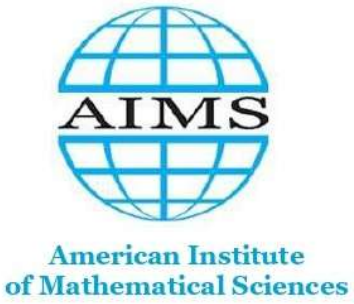
Thursday, June 4, 2026 19

Friday, June 5, 2026. ..... .22

Welcome
to the 12th International Conference Inverse Problems: Modeling and Simulation
May 31 - June 5, 2026, Paradise Bay Resort Hotel, Malta

The First International Conference "Inverse Problems: Modeling and Simulation" (sponsors: Fethiye Municipality, Office of Naval Research International Field Office, Naval Undersea Warfare Center (USA), Danish Interdisciplinary Inversion Group) was held on July 14 – 21, 2002, in Fethiye, Türkiye. 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, Türkiye. Sponsors: Fethiye Municipality, journals "Inverse Problems", "Journal of Inverse and Ill-Posed Problems", "Inverse Problems in Engineering", and by the Scientific and Technological Research Council of Türkiye (TUBITAK).
The Third International Conference Inverse Problems: Modeling and Simulation was held on May 29 – June 02, 2006, in Oludeniz - Fethiye, Mugla, Türkiye. 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, Türkiye. 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, Türkiye. The meeting was supported by TUBITAK.
The Eighth International Conference Inverse Problems: Modeling and Simulation was held on May 23 – 28, 2016 at the Liberty Hotels, Lykia, Ölüdeniz, Fethiye - Türkiye. 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, was held in Malta from May 26 to June 1, 2024, at the Paradise Bay Resort Hotel, Malta. The Eurasian Association on Inverse Problems was the principal sponsor of this conference.
The Twelfth International Conference Inverse Problems: Modeling and Simulation, will take place from May 31 to June 5, 2026, at the Paradise Bay Resort Hotel, Malta. The main sponsor of the conference is the Eurasian Association on Inverse Problems. The meeting is also supported by the American Institute of Mathematical Sciences (AIMS).

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
- Inverse Problems for Fractional Equations
- Physics-Informed Neural Networks for Solving Forward and Inverse Problems

Committees

Chair of the Conference: Alemdar Hasanov Hasanoğlu, Türkiye

Co-Chairs: Thorsten Hohage, Germany; Leonid Kunyansky, USA; Roman Novikov, France; Cristiana Sebu, Malta

International Program Committee:

- Giovanni S. Alberti, Italy
- Simon Arridge, United Kingdom
- Jin Cheng, China
- Hiromichi Itou, Japan
- Sergey I. Kabanikhin, Russia
- Barbara Kaltenbacher, Austria
- Antonino Morassi, Italy
- Eric Todd Quinto, USA
- Mikko Salo, Finland
- Otmar Scherzer, Austria

International Organizing Committee:

- Onur Baysal (Co-Chair), Malta
- Karel Van Bockstal, Belgium
- Nicole Farrugia, Malta
- Alexandre Jollivet, France
- Alexandre Kawano, Brazil
- Burhan Pektas, Türkiye
- Cristiana Sebu (Chair), Malta
- Samuel Spiteri, Malta
- Ye Zhang, China

CONFERENCE PROGRAMME OUTLINE

Registration: 10:00-20:00, May 31, 2026 (Sunday); 08:00-10:00, June 1, 2026 (Monday), Hotel Reception Hall

MONDAY June 1, 2026

10:00-10:35	**Opening Ceremony & Award Presentation** (Amphitheatre)			
10:40-11:20	**PLENARY SESSION (Salon A)** **Chair:** Thorsten Hohage			
11:20-11:40	**Coffee Break**			
	MINISYMPOSIUMS			
	Salon A	**Salon B**	**Salon C**	**Salon D**
11:40-13:20	**M1: Recent Advances in Inverse Scattering and Tomography** *Minisymposium dedicated to Professor Roman Novikov* Organizers: T. Hohage, M. Isaev, A. Jollivet **Session 1**	**M17: Microlocal and Applied Aspects of Inverse Problems** Organizers: V. Krishnan, E.T. Quinto **Session 1**	**M16: Advances in Inverse Coefficient Problems** Organizers: H. Garde, N. Hyvönen **Session 1**	**M22: Uncertainty Quantification for Inverse Problems: Methods, Software and Applications** Organizers: B.M. Afkham, C. Schenk, M. Pasha **Session 1**
13:20-14:30	**Lunch**			
14:30-16:10	**M1** (Continued) **Session 2** (Virtual Presentations)	**M4: New Trends in Regularization Theory** Organizers: S. Kindermann, R. Plato, B. Hofmann **Session 1**	**M16** (Continued) **Session 2**	**M6: Inverse Problem Theory for Innovation of Detection Methods** Organizers: H. Itou, Y. Kian, V.A. Kovtunenko **Session 1**
16:10-16:30	**Coffee Break**			
16:30-18:10	**M2: Inverse Problems in Hybrid Imaging Modalities** Organizers: S. Arridge, L. Kunyansky **Session 1**	**M4** (Continued) **Session 2**	**M14: Inverse Problems in Tomographic Imaging Applications: The Practical Perspective** Organizers: M. Duff, S. Hubmer, E. Sherina **Session 1**	**M6:** (Continued) **Session 2**
18:30-20:00	**Welcome Cocktail**			

	TUESDAY June 2, 2026			
09:00-09:40	**PLENARY SESSION (Salon A)** **Chair:** Gen Nakamura			
	MINISYMPOSIUMS			
	Salon A	**Salon B**	**Salon C**	**Salon D**
09:50-11:30	**M1: Recent Advances in Inverse Scattering and Tomography** (Continued) Organizers: T. Hohage, M. Isaev, A. Jollivet **Session 3**	**M4: New Trends in Regularization Theory** (Continued) Organizers: S. Kindermann, R. Plato, B. Hofmann **Session 3**	**M14: Inverse Problems in Tomographic Imaging Applications: The Practical Perspective** (Continued) Organizers: M. Duff, S. Hubmer, E. Sherina **Session 2**	**M20: Inverse Problems in Tomography: Theory, Simulation, and Emerging AI Methods** Organizers: A. Abhishek, R. Huber, T. Strauss **Session 1**
11:30-11:50	**Coffee Break**			
11:50-13:30	**M2: Inverse Problems in Hybrid Imaging Modalities** (Continued) Organizers: S. Arridge, L. Kunyansky **Session 2**	**M4** (Continued) **Session 4**	**M14** (Continued) **Session 3**	**M22: Uncertainty Quantification for Inverse Problems: Methods, Software and Applications** Organizers: B. M. Afkham, C. Schenk, M. Pasha **Session 2**
13:30-15:00	**Lunch**			
15:00-16:40	**M17: Microlocal and Applied Aspects of Inverse Problems** Organizers: V. Krishnan, E.T. Quinto **Session 2**	**M3: Inverse and Control Problems in Vibrating Structures: Theory, Applications and Computational Aspects** Organizers: O. Baysal, A. Kawano, A. Morassi **Session 1**	**M7: Applied Inverse Problems and Partial Differential Equations** Organizers: K. Van Bockstal, D. Lesnic **Session 1**	**M13: Numerical Methods and Analysis of Time-Dependent Inverse Problems and Related Applications** Organizers: C. Clason, G. Hu, H. Wang, J. Zou **Session 1**
16:40-17:00	**Coffee Break**			
17:00-18:40	**M17** (Continued) **Session 3**	**M3** (Continued) **Session 2**	**M7** (Continued) **Session 2**	**M9: Inverse Problems Under Poisson Noise** Organizers: F. Benvenuto, P. Massa
19:00-19:30	**Biennial Assembly of the Eurasian Association on Inverse Problems (Salon A)**			

	WEDNESDAY June 3, 2026			
09:00-09:40	**PLENARY SESSION (Salon A)** **Chair**: Otmar Scherzer			
	MINISYMPOSIUMS			
	Salon A	**Salon B**	**Salon C**	**Salon D**
09:50-11:30	**M11: Inverse Problems in Statistics** Organizer: P. Maréchal	**M12: Bayesian, Variational and Stochastic Methods for Uncertainty Quantification in Optimization and Inverse Problems** Organizers: C. Geiersbach, A.A. Khan, P.P. Tercero, C.Tammer **Session 1**	**M7: Applied Inverse Problems and Partial Differential Equations** (Continued) Organizers: K. Van Bockstal, D. Lesnic **Session 3**	**M10: Inverse Problems for Fractional Equations** Organizers: G. Covi, B. Kaltenbacher, M. Salo **Session 1**
11:30-11:50	**Coffee Break**			

Excursions

All tours below will take place on Wednesday, June 3, 2026, between 13:00 and 19:00.
Details of the tours are explained on the conference website.

Boat Tour

Prehistoric Temples Tour

Malta City Sightseeing Tour
(Blue Grotto, Ħagar Qim and Mnajdra Acheological Site, Mdina)

The tour fee must be paid to the conference assistant at the registration desk a few days before the tours begin.
Departures to excursions at 12:30 from the Paradise Bay Hotel lobby

	THURSDAY June 4, 2026			
09:00-09:40	**PLENARY SESSION (Salon A)** **Chair**: Jun Zou			
	MINISYMPOSIUMS			
	Salon A	**Salon B**	**Salon C**	**Salon D**
09:50-11:30	**M19: Reconstruction Methods for Inverse Problems and Related Studies** Organizers: M.V.de Hoop, M. Lim, G. Nakamura **Session 1**	**M20: Inverse Problems in Tomography: Theory, Simulation, and Emerging AI Methods** Organizers: A. Abhishek, R. Huber, T. Strauss **Session 2**	**M7: Applied Inverse Problems and Partial Differential Equations** (Continued) Organizers: K. Van Bockstal, D. Lesnic **Session 4**	**M5: Inverse Problems with Data-Driven Methods and Deep Learning** Organizer: L. Ratti **Session 1**
11:30-11:50	**Coffee Break**			
11:50-13:30	**M19** (Continued) **Session 2**	**M12: Bayesian, Variational and Stochastic Methods for Uncertainty Quantification in Optimization and Inverse Problems** (Continued) Organizers: C. Geiersbach, A.A. Khan, P.P. Tercero, C.Tammer **Session 2**	**M13: Numerical Methods and Analysis of Time-Dependent Inverse Problems and Related Applications** Organizers: C. Clason, G. Hu, H. Wang, J. Zou **Session 2**	**M5** (Continued) **Session 2**
13:30-15:00	**Lunch**			
15:00-16:40	**M21: Physics-Informed Neural Networks for Solving Forward and Inverse Problems** Organizers: A. Heinlein, C. Reisch **Session 1**	**M12** (Continued) **Session 3**	**M13** (Continued) **Session 3**	**M10: Inverse Problems for Fractional Equations** (Continued) Organizers: G. Covi, B. Kaltenbacher, M. Salo **Session 2**
16:40-17:00	**Coffee Break**			
17:00-18:40	**M21** (Continued) **Session 2**	**M12** (Continued) **Session 4**	**M8: Selected Topics of Inverse Problems** Organizers: A.H. Hasanoğlu, C. Sebu **Session 1**	**M10** (Continued) **Session 3**
19:15-23:30	**Conference Banquet**			

	FRIDAY June 5, 2026			
09:00-09:40	**PLENARY SESSION (Salon A)** **Chair**: Leonid Kunyansky			
	MINISYMPOSIUMS			
	Salon A	**Salon B**	**Salon C**	**Salon D**
09:50-11:30	**M19: Reconstruction Methods for Inverse Problems and Related Studies** (Continued) Organizers: M. V. de Hoop, M. Lim, G. Nakamura **Session 3**	**M12: Bayesian, Variational and Stochastic Methods for Uncertainty Quantification in Optimization and Inverse Problems** (Continued) Organizers: C. Geiersbach, A.A.Khan, P.P. Tercero, C.Tammer **Session 5**	**M8: Selected Topics of Inverse Problems** (Continued) Organizers: A.H. Hasanoğlu, C. Sebu **Session 2**	**M10: Inverse Problems for Fractional Equations** (Continued) Organizers: G. Covi, B. Kaltenbacher, M. Salo **Session 4**
11:30-11:50	**Coffee Break**			
11:50-13:30	**M18: Recent Progress in the Variational Optimization Approach and the Finite Element Method for the Solution of Inverse Problems** Organizers: L. Beilina, S. Kumarasamy	**M12** (Continued) **Session 6**		
13:30-15:00	**Lunch**			
15:30-16:30	**Closing Ceremony. Election of Committee Members for IPMS 2028 (Salon A)**			

CONFERENCE PROGRAMME

MONDAY, June 1, 2026

PLENARY SESSION (Salon A)
Chair: Thorsten Hohage

10:40-11:20	**Romina Gaburro,** University of Limerick, Ireland *Uniqueness and stability in anisotropic inverse problems*
11:20-11:40	**Coffee Break**

MINISYMPOSIUMS

M1: Recent Advances in Inverse Scattering and Tomography Chairs: T. Hohage, M. Isaev **Session 1** (11:40-13:20)	**M17: Microlocal and Applied Aspects of Inverse Problems** Chairs: V. Krishnan, E.T. Quinto **Session 1** (11:40-13:20)	**M16: Advances in Inverse Coefficient Problems** Chairs: H. Garde, N. Hyvönen **Session 1** (11:40-13:20)	**M22: Uncertainty Quantification for Inverse Problems: Methods, Software and Applications** Chairs: B.M.Afkham, C.Schenk, **Session 1** (11:40-13:20)
Salon A	**Salon B**	**Salon C**	**Salon D**
Roman Novikov, Ecole polytechnique, France, *Recent mathematical advances in holography and related problems* (11:40-12:05)	Richard Huber, University of Graz, Austria, *Optimal discretization in tomography* (11:40-12:05)	Lisa Schätzle, Aalto University, Finland, *Direct reconstruction method for inverse medium scattering under Born approximation* (11:40-12:05)	Leila Taghizadeh, TU Wien, Austria, *A Markov chain Monte Carlo approach for Bayesian inverse problems with limited data* (11:40-12:05)
Vladimir Druskin, Worcester Polyt. Inst., USA, *Generalized discrete transmutation operators and computation of data-driven internal solutions in inverce scattering* (12:05-12:30)	James Webber, Case Western Reserve University, USA, *Joint recovery of the gamma ray source intensity and attenuation coefficient in emission Compton CT* (12:05-12:30)	David Johansson, Aarhus University, Denmark, *Recovery of nonlinear material parameters in a quasilinear Lamé system* (12:05-12:30)	Mirjeta Pasha, Virginia Tech, USA, *Priorconditioned sparsity-promoting projection methods for deterministic and Bayesian linear inverse problems* (12:05-12:30)
Mikhail Isaev, UNSW Sydney, Australia, *PSWF-Radon approach to super-resolution in Fourier analysis* (12:30-12:55)	Yutong Wu, RICAM, Austria, *Biplane imaging for fixed dipole emitters in cryo-single molecule localization microscopy* (12:30-12:55)	Thanasis Zacharopoulos, Aarhus University, Denmark, *The initial-to-final-state inverse problem for the Schrödinger equation* (12:30-12:55)	Christina Schenk, IMDEA Materials Institute, Spain, *Advanced surrogates for Bayesian calibration in complex inverse problems* (12:30-12:55)
Pierre Maréchal, University of Toulouse, France, *Deconvolution on circles and spheres* (12:55-13:20)	Jaakko Kultima, RICAM, Austria, *Computationally efficient treatment of uncertain smoothing priors in inverse problems* (12:55-13:20)	Hjørdis Schlüter, University of Helsinki, Finland, Boundary determination in anisotropic elasticity (12:55-13:20)	Lassi Roininen, LUT Univ., Finland, *Uncertainty quantification for electrical impedance tomography using quasi-Monte Carlo methods* (12:55-13:20)
13:20-14:30	**Lunch**		

Salon A	Salon B	Salon C	Salon D
M1 (Continued: Virtual presentations) Chairs: T. Hohage, M. Isaev **Session 2** (14:30-16:10)	**M4: New Trends in Regularization Theory** Chairs: S. Kindermann, R. Plato **Session 1** (14:30-16:10)	**M16** (Continued) Chairs: H. Garde, N. Hyvönen **Session 2** (14:30-16:10)	**M6: Inverse Problem Theory for Innovation of Detection Methods** Chairs: H. Itou, V.A. Kovtunenko **Session 1** (14:30-16:10)
Iskander Taimanov, Lomonosov Moscow State University, Russia, *On PT-symmetric periodic one-dimensional Schrodinger operators* (14:30-14:55)	Otmar Scherzer, Universität Wien, Austria, *Regularization methods for nonlinear inverse problems* (14:30-14:55)	Marvin Knöller, University of Helsinki, Finland, *A computational method for the inverse Robin problem with convergence rate* (14:30-14:55)	Masaru Ikehata, Hiroshima University, Japan, *Removing small wavenumber constraints in side B of the probe method* (14:30-14:55)
Petr Grinevich, Steklov Mathematical Institute, Russia, *Point scatterers in quantum mechanics* (14:55-15:20)	Thorsten Hohage, Universität Göttingen, Germany, *Inverse problems in quantum statistics and their regularization* (14:55-15:20)	Altti Jääskeläinen, Aalto University, Finland, *Projection-based handling of uncertainties in head imaging with EIT and DOT* (14:55-15:20)	Jean-Guy Caputo, INSA de Rouen Normandie, France, *Detecting and localizing disturbances in networks* (14:55-15:20)
Andrey Shurup, Lomonosov Moscow State University, Russia, *Functional-analytical Novikov's algorithms in ultrasound and ocean tomography* (15:20-15:45)	Ronny Ramlau, Johannes Kepler Universität Linz, Austria, *On the use of Arnoldi-type decompositions for the regularization of inverse problems* (15:20-15:45)	Eliane Kummer, Karlsruhe Institute of Technology, Germany, *Domain derivative and shape reconstruction for a transient inverse backscattering problem* (15:20-15:45)	Hiroshi Takase, Kyushu University, Japan, *Stability for boundary determination in elliptic inverse problems and extensions to evolution equations* (15:20-15:45)
Vladimir Sivkin, HSE University, Russia, *A two-point phase recovering from holographic data on a single plane* (15:45-16:10)	Simon Hubmer, Johannes Kepler Universität Linz, Austria, *The SCD Semismooth* Newton method for the efficient minimization of Tikhonov functionals* (15:45-16:10)	Henrik Garde, Aarhus University, Denmark, *Reconstruction of general anisotropic self-adjoint inclusions in the Calderón problem* (15:45-16:10)	Ziyao Zhao, University of Helsinki, Finland, *An inverse Signorini obstacle problem* (15:45-16:10)
16:10-16:30	**Coffee Break**		
M2: Inverse Problems in Hybrid Imaging Modalities Chair: L. Kunyansky **Session 1** (16:30-18:10)	**M4** (Continued) Chairs: S. Kindermann, R. Plato **Session 2** (16:30-18:10)	**M14: Inverse Problems in Tomographic Imaging Applications: The Practical Perspective** Chairs: M. Duff, S. Hubmer **Session 1** (16:30-18:10)	**M6** (Continued) Chairs: H. Itou, V.A. Kovtunenko **Session 2** (16:30-17:20)
Shari Moskow, Drexel University, USA, *Optimality and bounds for internal solutions generated from boundary data-driven Gramians* (16:30-16:55)	Christina Brandt, Universität Greifswald, Germany, *Regularization methods for time-dependent magnetic particle imaging* (16:30-16:55)	Tanja Tarvainen, University of Eastern Finland, *Time-domain diffuse optical tomography using nanosecond light sources* (16:30-16:55)	Ryusei Yamashita, National Institute of Technology, Toyama College, Japan, *Detection of defects by the monotonicity test for the magnetic Schrödinger* operator (16:30-16:55)

Peter Elbau, University of Vienna, Austria, *Rotational motion reconstruction from tomography data* (16:55-17:20)	Elena Resmerita, Universität Klagenfurt, Austria, *A unified variational framework for deblurring images under multiplicative* noise (16:55-17:20)	Bill Lionheart, University of Manchester, UK, *Some cautionary tales in complex and tensor tomography* (16:55-17:20)	Hiromichi Itou, Chuo University, Japan, *On mathematical analysis for viscoelastic models with fractional derivatives* (16:55-17:20)
Jenni Poimala, University of Eastern Finland, Finland, *Model-corrected learned approaches for fast limited-view photoacoustic tomography* (17:20-17:45)	Kristian Bredies, University of Graz, Austria, *Infinite infimal convolution regularization: concepts, models and optimization* (17:20-17:45)	Victoria Laidlaw, Johannes Kepler University Linz, Austria, *A mathematical framework for Fourier-type wavefront sensing in adaptive optics* (17:20-17:45)	
Niko Hänninen, University of Eastern Finland, *Estimating optical parameters in quantitative photoacoustic tomography utilizing Monte Carlo method for light transport* (17:45-18:10)	Andrea Ebner, Universität Innsbruck, Austria, *Learning tight frame decompositions via manifold optimization for inverse problem regularization* (17:45-18:10)	Michael Quellmalz, Berlin Technical University, Germany, *Time-harmonic optical flow with applications in Elastography* (17:45-18:10)	

TUESDAY, June 2, 2026

PLENARY SESSION (Salon A)
Chair: Gen Nakamura

09:00-09:40 **Venkateswaran Perur Krishnan,** Tata Institute of Fundamental Research, Centre for Applicable Mathematics, India
New range characterizations for the spherical Radon transform in all dimensions

MINISYMPOSIUMS

M1: Recent Advances in Inverse Scattering and Tomography	**M4: New Trends in Regularization Theory**	**M14: Inverse Problems in Tomographic Imaging Applications: The Practical Perspective**	**M20: Inverse Problems in Tomography: Theory, Simulation, and Emerging AI Methods**
Chairs: T. Hohage, M. Isaev	Chairs: S. Kindermann, R. Plato	Chairs: S. Hubmer, E. Sherina	Chair: R. Huber
Session 3 (09:50-11:30)	**Session 3** (09:50-11:30)	**Session 2** (09:50-11:30)	**Session 1** (09:50-11:30)
Salon A	**Salon B**	**Salon C**	**Salon D**
Jesse Railo, LUT University, Finland, *Non-abelian and weighted X-ray transforms* (09:50-10:15)	Barbara Kaltenbacher, Universität Klagenfurt, Austria, *All-at-once Kaczmarz methods for time dependent problems* (09:50-10:15)	Jenni Poimala, University of Eastern Finland, Finland, *Photoacoustic tomography image reconstruction from experimental data* (09:50-10:15)	Todd Quinto, Tufts University, USA, *A unified perspective on microlocal artifacts in limited data tomography and inverse problems* (09:50-10:15)

Björn Müller, Max-Planck-Inst. for Solar Syst. Res., Germany, *Unique identifiability of interior parameters in passive imaging with appl. to helioseismology* (10:15-10:40)	Tim Jahn, Technische Universität Berlin, Germany, *Dimensionality reduction of statistical inverse problems through pretraining* (10:15-10:40)	Margaret Duff, STFC Scientific Computing, UK, *Improving the usability and accessibility of image reconstruction algorithms: stochastic optimisation for PET, MRI and CT* (10:15-10:40)	Sean Holman, University of Manchester, UK, *Inverse problems for strain* (10:15-10:40)
Xiaoxu Xu, University of Göttingen, Germany, *Asymptotic formulas for phase recovering from phaseless data of biharmonic waves at a fixed frequency* (10:40-11:05)	Tobias Wolf, Univ. Caen Normandie, France, *Gradient flow training dynamics for infinite-dimensional inverse problems from finite measurements*: theory and applications (10:40-11:05)	Bernadett Stadler, Johann Radon Institute (RICAM), Austria, *Adaptive optics simulations for 24/7 laser communication and ranging* (10:40-11:05)	Weihong Guo, Case Western Reserve University, USA, *Fusion-based 3D image super-resolution from truncated k-space data in quantitative magnetic resonance imaging* (10:40-11:05)
Arjun Vijayan Nair, Ecole Polytechnique, France, *On Karp expansion for radiation solutions in two dimensions* (11:05-11:30)	Bastian Dittrich, Universität Würzburg, Germany, *Tikhonov regularization with ℓ^0-constraint* (11:05-11:30)	Alexander Denker, University College London, UK, *Deep learning based reconstruction methods for electrical impedance tomography* (11:05-11:30)	Benjamin Hackl, University of Graz, Austria, *Gratopy: a toolbox for tomographic reconstruction using pixel-driven projection methods* (11:05-11:30)
11:30-11:50	**Coffee Break**		
M2: Inverse Problems in Hybrid Imaging Modalities (Continued) Chairs: L. Kunyansky, S. Moskow **Session 2** (11:50-13:55)	**M4** (Continued) Chairs: S. Kindermann, R. Plato **Session 4** (11:50-13:05)	**M14** (Continued) Chairs: M. Duff,, E. Sherina **Session 3** (11:50-13:05)	**M22: Uncertainty Quantification for IPs: Meth., Software and Applications** (Continued) Chairs: C.Schenk, M. Pasha **Session 2** (11:50-13:45)
Salon A	**Salon B**	**Salon C**	**Salon D**
Leonid Kunyansky, University of Arizona, USA, *Fast algorithms for photoacoustic tomography in a circular detection geometry* (11:50-12:15)	Tram Nguyen, MPI Solar Systems Research, Germany, *The extended adjoint state and nonlinearity in correlation-based passive imaging* (11:50-12:15)	Martin Sæbye Carøe, Technical University of Denmark, *Multimodal tomography of the martian meteorite black beauty using attenuation and diffraction imaging* (11:50-12:15)	Babak Maboudi Afkham, University of Oulu, Finland, *Inhomogeneous priors for Bayesian inverse problems* (11:50-12:15)
Richard Kowar, University of Innsbruck, Austria, *Full-field Photoacoustic tomography with variable sound speed and attenuation* (12:15-12:40)	Sarah Eberle-Blick, Katholische Univ. Eichstätt-Ingolstadt, Germany, *A monotonicity-based regularization approach to shape reconstruction for the Helmholtz equation* (12:15-12:40)	Simon Hackl, Johannes Kepler University Linz, Austria, *Geometrical acoustics-based focusing algorithms for layered media in medical ultrasound* (12:15-12:40)	John Darges, Emory University, USA, *Neural optimal design of experiment for inverse problems* (12:15-12:40)
Mirza Karamehmedovic, TU Denmark, *Local reconstruction of coefficients in quantitative photoacoustic tomography* (12:40-13:05)	Harshit Bajpai, Indian Institut of Technology Roorkee, India, *Data-assisted iterative regularization via graph Laplacians: theory and applications* (12:40-13:05)	Holly George-Samuels, University of Manchester, UK, *Sparse SAR image reconstruction* (12:40-13:05)	Andrea Tonini, Politecnico di Milano, Italy, *Uncertainty quantification variational autoencoders in Bayesian inverse problems for patient-specific* (12:40-13:00)

Jeremy Hoskins, University of Chicago, USA, *Flexural wave scattering:forward and inverse problems* (13:05-13:30)			Ruben Harris, FU Berlin, Germany, *Analysis of ensemble Kalman inversion with a time-dependent linear forward operator* (13:00-13:20)
Manabu Machida, Kindai University, Japan, *Nonlinear Rytov approximation for optical tomography* (13:30-13:55)			Kenji Amaya, Tokyo Institute of Technology, Japan, *Industrial IPs: from mathematical modeling to practical system implementation* (13:20-13:45)
13:30-15:00	**Lunch**		
M17: Microlocal and Applied Aspects of Inverse Problems Chairs: V. Krishnan, E.T. Quinto **Session 2** (15:00-16:40)	**M3: Inverse and Control Problems in Vibrating Structures: Theory, Appl. and Computational Aspects** Chairs: O Baysal, A. Kawano **Session 1** (15:00-16:40)	**M7: Applied Inverse Problems and Partial Differential Equations** Chairs: K. Van Bockstal, D. Lesnic **Session 1** (15:00-16:40)	**M13: Numerical Methods and Analysis of Time-Dependent Inverse Problems and Related Applications** Chairs: G. Hu, H. Wang, J. Zou **Session 1** (15:00-16:40)
Salon A	**Salon B**	**Salon C**	**Salon D**
Jan Boman, Stockholm University, Sweden, *The interior problem for the Radon transform* (15:00-15:25)	Mohamed Ichchou, Ecole Centrale de Lyon, France, *Inverse wave problems: review with applications* (15:00-15:20) Thomas Brion, Ecole Centrale de Lyon, France, *k-space identification from 2-D wave fields based on algebraic techniques* (15:20-15:40)	Irina V. Melnikova, Ural Federal University, Russia, *Correctness and regularization of stochastic problems* (15:00-15:25)	Anne Wald, University of Göttingen, Germany, *Regularization of time-dependent inverse problems* (15:00-15:25)
Alexander Katsevich, Univercity of Central Florida, Orlando, USA, *High-dimensional Laplace symptotics up to the concentration threshold* (15:25-15:50)	Alemdar Hasanoğlu, Kocaeli Univ., Türkiye, *Simultaneous reconstruction of a bending moment and shear force in an AFM cantilever from measured slope and seflection* (15:40-16:00)	Cristiana Sebu, University of Malta, Malta, *Mollifier methods for Electrical Impedance Tomography* (15:25-15:50)	Bangti Jin, The Chinese University of Hong Kong, China, *Point source identification for the heat equation* (15:25-15:50)
Clifford Nolan, University of Limerick, Ireland, *Mitigation of artifacts in RADAR imaging* (15:50-16:15)	Antonio Bilotta, Univ. of Calabria, Italy, *Dispersion-based identification of mass density distributions via inverse parametrized eigenvalue solutions* (16:00-16:20)	Nataliia Kinash, University of Leeds, UK, *Inverse thermal-wave modelling of heat transfer in biological tissues* (15:50-16:15)	Yikan Liu, Kyoto University, Japan, *Inverse source problem for a time-fractional Maxwell model* (15:50-16:15)
Ekaterina Sherina, University of Vienna, Austria, *On phase unwrapping via digital wavefront sensors* (16:15-16:40)	Alexandre Kawano, Universidade de Sao Paulo, Brazil, *Passive listening of the sea by vibrating structures or by microphones* (16:20-16:40)	Mihaela Pricop-Jeckstadt, Nat. Univ. of Sci. and Tech. Politehnica Bucharest, Romania, *Extrinsic dynamical data analysis on manifolds* (16:15-16:40)	Wei Gong, Chinese Academy of Sciences, *A shape optimization approach for source identification in elliptic and parabolic equations* (16:15-16:40)

16:40-17:00	Coffee Break		
M17 (Continued) Chairs: V. Krishnan, E.T. Quinto **Session 3** (17:00-18:40)	**M3** (Continued) Chairs: O. Baysal, A. Morassi **Session 2** (17:00-18:40)	**M7** (Continued) Chairs: K. Van Bockstal, D. Lesnic **Session 2** (17:00-18:40)	**M9: Inverse Problems Under Poisson Noise** Chair: P. Massa (17:00-18:40)
Salon A	**Salon B**	**Salon C**	**Salon D**
Howard Levinson, Oberlin College, USA, *Lattice Algorithms for reconstruction of integer-valued images* (17:00-17:25)	Salvatore Caddemi, University of Catania, Italy, *Crack location in beams by analysis of response to moving loads* (17:00-17:20)	Ye Zhang, Shenzhen MSU-BIT University, China, *Asymptotic expansion regularization methods for inverse problems in singularly perturbed PDEs* (17:00-17:25)	Patricia Römer, Fraunhofer IMTE, Germany, *Recovery strategies for low-count Poisson phase retrieval* (17:00-17:25)
Gesa Sarnighausen, University of Göttingen, Germany, *Solving dynamic inverse problems with classical and data-driven methods* (17:25-17:50)	Francesco Cannizzaro, University of Catania, Italy, *Identif. of multiple cracks in bams and frames through influence functions* (17:20-17:40) Paolo Venini, University of Pavia, Italy, *Multimaterial topology optimization of heat conduction problems* (17:40-18:00)	Madi Yergaliyev, Institute of Mathematics and Mathematical Modeling, Kazakhstan, *Inverse problems for nonlinear parabolic equations in degenerate domains* (17:25-17:50)	Daniele Pedemonte, Università di Genova, Italy. *Poisson-based risk estimation for hyperparameter optimization in regularized binary regression on DHEAL-COM datasets* (17:25-17:50)
Rahul, Indian Institute of Technology Ropar, India, *Inverse problems for a coupled system of wave equations with point source-receiver data* (17:50-18:15)	Onur Baysal, University of Malta, Malta, *Bridge vehicle load identification over space and time based on boundary slope measurements* (18:00-18:20)	Frederick Maes, Ghent University, Belgium, *Inverse source problems for the fractional heat equation with phase-lag* (17:50-18:15)	Alessia Guidetti, Università di Genova, Italy, *Adaptive group-sparse regularization for Poisson linear inverse problems* (17:50-18:15)
Anamika Purohit, Indian Institute of Technology Bombay, India, *An inverse problem for a fourth-order nonlinear Schrödinger equation* (17:50-18:40)	Antonino Morassi, University of Udine, Italy, *Isospectral axially vibrating nanobeams* (18:20-18:40)	Daurenbek Serikbaev, Institute. of Mathematics and Mathematical Modeling, Kazakhstan, *An inverse problem for a hyperbolic equation* (18:15-18:40)	Martin Klakow, University of Würzburg, Germany, *Regularized hypothesis testing for inverse problems with Poisson data* (18:15-18:40)
18:50-19:20	**Biennial Assembly of the Eurasian Association on Inverse Problems (Salon A)**		

WEDNESDAY, June 3, 2026

PLENARY SESSION (Salon A)
Chair: Otmar Scherzer

09:00-09:40 **Ekaterina Sherina**, University of Vienna, Austria
Inversion methods for strain and stiffness reconstruction in Quantitative Elastography

MINISYMPOSIUMS

M11: Inverse Problems in Statistics Chair: P. Maréchal (09:50-11:30)	**M12: Bayesian, Variational and Stochastic Methods for Uncertainty Quantification in Optimization and Inverse Problems** Chairs: C. Geiersbach, C. Tammer **Session 1** (09:50-11:30)	**M7: Applied Inverse Problems and Partial Differential Equations** (Continued) Chairs: K. Van Bockstal, D. Lesnic **Session 3** (09:50-11:30)	**M10: Inverse Problems for Fractional Equations** Chairs: G. Covi, B. Kaltenbacher **Session 1** (09:50-11:30)
Salon A	**Salon B**	**Salon C**	**Salon D**
Valérie Girardin, Université de Caen Normandie, France, *Minimum of divergences with relaxation: alternative approaches to duality* (09:50-10:15)	Ana Carpio, Universidad Complutense de Madrid, Spain, *Uncertainty quantification in shear elastography* (09:50-10:15)	Daniel Lesnic, University of Leeds, UK, *Inverse boundary problems of nonlinear corrosion* (09:50-10:15)	Tuhin Ghosh, F, Harish-Chandra Research Institute, India, *On fractional Borg-Levinson problem* (09:50-10:15)
Anne Vanhems, Toulouse Business School, France, *Random coefficients regressions and Radon transform inversion* (10:15-10:40)	Patrizia Daniele, University of Catania, Italy, *A variational optimization framework for sustainable parcel locker networks* (10:15-10:40)	Khonatbek Khompysh, Al-Farabi Kazakh National University, Kazakhstan, *An inverse problem for pseudo-parabolic equations* (10:15-10:40)	Marian Slodicka, Ghent University, Belgium, *An inverse source problem in a variable-order time-fractional diffusion PDE* (10:15-10:40)
Thanh M.P.Ngoc, Universite Sorbonne Paris Nord, France, *Nonparametric estimation of the fragmentation kernel based on a PDE stationary distribution approximation* (10:40-11:05)	Adrian Zălinescu, Alexandru I. Cuza University of Iaşi, Romania, *Kolmogorov-type PDEs arising from BSDEs with delay: A comparison of solution concepts* (10:40-11:05)	Pelin Şenel, Karadeniz Technical University, Türkiye, *Level-set approach for the interface determination of composite materials* (10:40-11:05)	William Rundell, Texas A&M University, USA, *Identification of space-dependent coefficients in two competing terms of a nonlinear subdiffusion equation* (10:40-11:05)
Clément Marteau, Université Lyon I - Claude Bernard, France, *A non-asymptotic upper bound in prediction for the PLS estimator* (11:05-11:30)	Chaoli Yao, Hainan University, China, *Image regularity conditions based on nonconvex separation with application* (11:05-11:30)	Arshyn Altybay, Inst. of Math. and Math. Modeling, Kazakhstan, *A backward problem for the pseudo-parabolic equation* (11:05-11:30)	Teemu Tyni, University of Oulu, Finland, *Inverse problems for nonlinear and nonlocal wave equations* (11:05-11:30)

THURSDAY, June 4, 2026			
PLENARY SESSION (Salon A) **Chair:** Jun Zou			
09:00-09:40	**Guanghui Hu**, Nankai University, China *Inverse source problems for acoustic wave equations*		
MINISYMPOSIUMS			
M19: Reconstruction Methods for Inverse Problems and Related Studies Chairs: M. Lim, G. Nakamura **Session 1** (09:50-11:30)	**M20: Inverse Problems in Tomography: Theory, Simulation, and Emerging AI Methods** (Continued) Chair: R. Huber **Session 2** (09:50-11:05)	**M7: Applied Inverse Problems and Partial Differential Equations** (Continued) Chairs: K. Van Bockstal, D. Lesnic **Session 4** (09:50-11:30)	**M5: Inverse Problems with Data-Driven Methods and Deep Learning** Chair: L. Ratti **Session 1** (09:50-11:30)
Salon A	**Salon B**	**Salon C**	**Salon D**
Mikyoung Lim, Korea Adv. Inst. of Science and Tech. (KAIST), Korea, *Construction of neutral inclusions with imperfect interfaces using conformal mapping* (09:50-10:15)	Luke Lozenski, Technical University of Denmark, *Neural representations as proximal regularizers for nano-CT imaging of sustainable cement formulations* (09:50-10:15)	Anar Rahimov Inst. of Cont. Syst. and Baku State University, Azerbaijan, *Numerical solution to an ISP for hyperbolic equation with nonlocal conditions* (09:50-10:15)	Cordula Reisch, Roskilde University, Denmark, *An inverse problem perspective on model discovery with physics-informed neural networks* (09:50-10:15)
Satoshi Masaki, Hokkaido University, Japan, *On an inverse problem for NLS equation* (10:15-10:40)	Marion Savanier, Université Paris-Saclay, France, *Plug-and-Play for PET reconstruction with MRI guidance* (10:15-10:40)	Shakir Aidos, Al-Farabi Kazakh National University, Kazakhstan, *Inverse source problem for the parabolic equation* (10:15-10:40)	Matti Lassas, University of Helsinki, Finland, *Mapping properties of neural networks and applications in inverse problems* (10:15-10:40)
Won-Kwang Park, Kookmin Univ. Korea, *Fast localization of unknown objects from two-dimensional Fresnel experimental dataset* (10:40-11:05)	Jonas Bresch, Technical University of Berlin, Germany, *Generalized Radon cumulative distribution transform for pattern recognition* (10:40-11:05)	Andrei-Vlad Cataron, University of Bucharest, Romania, *A regularising iterative algorithm for the Cauchy problem in elasticity* (10:40-11:05)	Alessandro Lanza, University of Bologna, Italy, *Data-driven approach for additive signal decomposition* (10:40-11:05)
Atsuhide Ishida, Tokyo University of Science, Japan, *On inverse scattering for time-decaying harmonic and repulsive potentials* (11:05-11:30)		Murat Mukhambetkaliyev, Al-Farabi Kazakh National Univ., Kazakhstan, *An inverse problem for a pseudoparabolic equation* (11:05-11:30)	Markus Holzleitner, Johannes Kepler Univ., Austria, *Regularized learning from functional data under covariate shift with appl. to IPs* (11:05-11:30)
11:30-11:50	**Coffee Break**		
M19 (Continued) Chairs: M. Lim, G. Nakamura **Session 2** (11:50-13:55)	**M12: Bayesian, Var. and Stoch. Meth. for Uncertainty Quantification in Optimization and IPs** (Continued) Chairs: A. A. Khan, P. Pedregal **Session 2** (11:50-13:30)	**M13: Numerical Methods and Analysis of Time-Dependent IPs and Related Applications** Chairs: G. Hu, H. Wang, **Session 2** (11:50-13:55)	**M5** (Continued) Chair: L. Ratti **Session 2** (11:50-13:50)

Salon A	Salon B	Salon C	Salon D
Gen Nakamura, Hokkaido University, Japan, *Spectral inversion analysis for clustered eigenvalues* (11:50-12:15)	Hans-Jörg Starkloff, Technische Universität Bergakademie, Germany, *Measurability issues for inverse stochastic elliptic variational problems* (11:50-12:15)	Jijun Liu, Southeast University, China, *Variational data assimilation for initial potential vorticity in a two-layer quasi-geostrophic model* (11:50-12:15)	Duc-Lam Duong, University of Oulu, Finland, *Accelerating posterior sampling in Bayesian inverse problems with diffusion models* (11:50-12:10)
Andrea Aspri, Università degli Studi di Milano Statale, Italy, *Lipschitz stability in determining polyhedral inclusions from local boundary data*(12:15-12:40)		Tram Nguyen, MPI Solar Syst. Res., Germany, *Data assimilation via model reference adaptation for linear and nonlinear dynamical systems* (12:15-12:40)	Barbara Palumbo, Università di Genova, Italy, *Convergence rates for Tikhonov regularization on compact sets: application to neural networks* (12:10-12:30)
Hisashi Morioka, Ehime University, Japan, *Visibility of resonances and invisibility of eigenvalues via scattered waves for tunable quantum walks* (12:40-13:05)	Pablo Pedregal, Universidad de Castilla-La Mancha, Spain, *DeepONet: a deep learning–based framework for approximating linear and nonlinear operators* (12:15-12:40)	Haibing Wang, Southeast University, China, *Enhanced inversion of nonsmooth diffusion coefficient in the diffusion equation from multitemporal observations* (12:40-13:05)	Paolo Angella, University of Genova, Italy, *Infinite-dimensional generative sensing* (12:30-12:50)
			Amin Sabir, University of Bath, UK, *Learned regularisation methods for light-sheet microscopy* (12:50-13:10)
Shiwei Sun, The Hong Kong University of Science and Technology, China, *Domain sampling methods for an inverse boundary value problem of the heat equation* (13:05-13:30)	Neven Hadžić, University of Zagreb, Croatia, *A probabilistic approach to modeling biofouling development on marine vessel hulls* (12:40-13:05)	Lei Zhang, Zhejiang University of Technology, China, *Inverse problems of output feedback controller via contraction metrics for uncertain nonlinear systems* (13:05-13:30)	Sofia Agostoni, University of Genoa, Italy, *(Deep) regularisation for multi-frame deconvolution under Poisson noise: the case of Image Scanning Microscopy* (13:10-13:30)
Hyeuknam Kwon, Yonsei University, Korea, *AI and Numerical Methods for Inverse Problems in EIT* (13:30-13:55)	Victor A. Kovtunenko, University of Graz, Austria, *Semi-smooth optimization methods for solution of contact and dynamic problems* (13:05-13:30)	Xinlin Cao, The Hong Kong Polytechnic University, China, *Optical inversion using plasmonic contrast agents* (13:30-13:55)	Vu Thanh Trung, University of Cambridge, United Kingdom, *Plug-and-play ADMM for photocurrent mapping: An open-source implementation in LION* (13:30-13:50)
13:30-15:00	**Lunch**		

MINISYMPOSIUMS			
M21: Physics-Informed Neural Networks for Solving Forward and Inverse Problems Chairs: A. Heinlein, C. Reisch **Session 1** (15:00-16:40)	**M12** (Continued) Chairs: C. Geiersbach, A. A. Khan **Session 3** (15:00-16:40)	**M13** (Continued) Chairs: G. Hu, H. Wang, J. Zou **Session 3** (15:00-16:40)	**M10: Inverse Problems for Fractional Equations** (Continued) Chairs: G. Covi, B. Kaltenbacher **Session 2** (15:00-16:40)
Salon A	**Salon B**	**Salon C**	**Salon D**

Andreas Langer, Lund University, Sweden, *Why PINNs make sense but can still fail: A mathematical investigation* (15:00-15:25)	Andrea Aspri, Università degli Studi di Milano Statale, Italy, *Neural operators for the Dirichlet-to-Neumann map* (15:00-15:25)	Yukun Guo, Harbin Inst.of Techn., China, *A time-domain direct sampling method for inverse acoustic scattering problems* (15:00-15:25)	Shengfeng Zhu, East China Normal University, China, *Geometric inverse problems in time-fractional subdiffusion* (15:00-15:25)
Zeina Al Masry, FEMTO-ST Inst. and SUPMICROTECH-ENSMM, France, *An interpretable methodology for model identification based on port Hamiltonian systems and neural networks* (15:25-15:50)	Anna Ochal, Jagiellonian University, Poland, *Optimal control problem for elliptic hemivariational inequalities* (15:25-15:50)	Hongjie Li, Tsinghua University, China, *A time-domain direct sampling method for inverse elastic scattering problems* (15:25-15:50)	Karel Van Bockstal, Ghent University, Belgium, *On the impulse response of fractionally damped oscillators: a closed-form approximation* (15:25-15:50)
Ander Biguri, University of Cambridge, UK, *Various physics-driven learned tomographic reconstructions and the impact of the physics* (15:50-16:15)	Kang Liu, Universite Bourgogne Europe, France, *From backward hest equation to generative models* (15:50-16:15)	Vinay Rana, Indian Inst. of Technology, Ropar, India, *An inverse obstacle scattering problem related to elastic equation with traction-free boundary condition* (15:50-16:15)	Zhou Zhi, The Hong Kong Polytechnic University, China, *Discrete nonlocal Calderon problems on multidimensional lattice graphs* (15:50-16:15)
Luca Ratti, Univ. of Bologna, Italy, *Variational and learned techniques for (multi-frequency) Electrical Impedance Tomography* (16:15-16:40)	Laurent Seppecher, École Centrale Lyon, France, *Interferometric LASSO for stable wave source inversion in random media* (16:15-16:40)	Jun Zou, The Chinese University of Hong Kong, China, *Iterative direct sampling methods for nonlinear inverse problems* (16:15-16:40)	Philipp Zimmermann, University of Barcelona, Spain, *The Calderón problem for weakly viscous nonlocal wave equations* (16:15-16:40)
16:40-17:00	**Coffee Break**		
M21 (Continued) Chairs: A. Heinlein, C. Reisch **Session 2** (17:00-18:50)	**M12** (Continued) Chairs: A.A. Khan, C. Tammer **Session 4** (17:00-18:40)	**M8: Selected Topics of Inverse Problems** Chairs: A.H. Hasanoğlu, C. Sebu **Session 1** (17:00-18:40)	**M10** (Continued) Chairs: G. Covi, B. Kaltenbacher **Session 3** (17:00-18:40)
Salon A	**Salon B**	**Salon C**	**Salon D**
Roberta Tittarelli, Université Bourgogne-Franche-Comté, France, *Adapted VPINN for model parameter identification of beam-like structures* (17:00-17:25)	Oliver Ernst, Chemnitz University of Technology, Germany, *Regularization Is not MAP, and neither Is it Bayesian: common misconceptions in UQ for inverse problems* (17:00-17:25)	Marek A. Kojdecki, Military University of Technology, Poland, *Discrepancy principles as parameter choice rules in Tikhonov regularisation – implicit discrepancy principle* (17:00-17:25)	Igor Podlubny, Technical University of Kosice, Slovakia, *From numerical fractional-order differentiation to simulation of signed probability distributions* (17:00-17:25)
Pascal Fernsel, University of Bremen, Germany, *Physics-informed neural networks for parameter identification problems with applications in automated damage detection* (17:25-17:50)	Stefan Kindermann, Johannes Kepler University Linz, Austria, *Parameter identification for a contact problem* (17:25-17:50)	Sakthivel Kumarasamy, Indian Institute of Space Science and Technology (IIST), India, sakthivel@iist.ac.in *Inverse source problems of the damped Euler-Bernoulli beam and plate models* (17:25-17:50)	Bangti Jin, The Chinese University of Hong Kong, China, *Inverse problems for spatially variable-order fractional diffusion* (17:25-17:50)

Roel Hacking, Eindhoven University of Technology, Netherlands, *Physics-informed neural networks for inverse optical design* (17:50-18:10)	Simona Beresova, Institute of Geonics, Czech Republic, *Surrogate-accelerated MCMC for Bayesian inference with Gaussian random field materials* (17:50-18:15)	Divyansh Agrawal, University of Jyväskylä, Finland, *On the null space of the backprojection operator and Rubin's conjecture for the spherical mean transform* (17:50-18:15)	Giovanni Covi, University of Jyväskylä, Finland, *Geometrical optics for the fractional Helmholtz equation* (17:50-18:15)
Matthias Höfler, Graz Univ.ity, Austria, *On parameter identification with physics-informed neural networks in three-dimensional elasticity* (18:10-18:30)			
Aravinth Ravi, Kansas State University, USA, *A spectral-based model-informed neural network for solving the inverse source and scattering problems* (18:30-18:50)	Christian Aarset, France, *Optimal experimental design for passive imaging* (18:15-18:40)	Tchamiè Boris Gnamah, INSA de Rouen en Normandie, France, *Inverse problem of sources in two coupled parabolic PDEs of the advection-dispersion-reaction type* (18:15-18:40)	Teresa Rauscher, University of Graz, Austria, *Mathematical analysis of fractional models in medical imaging* (18:15-18:40)

FRIDAY, June 5, 2026

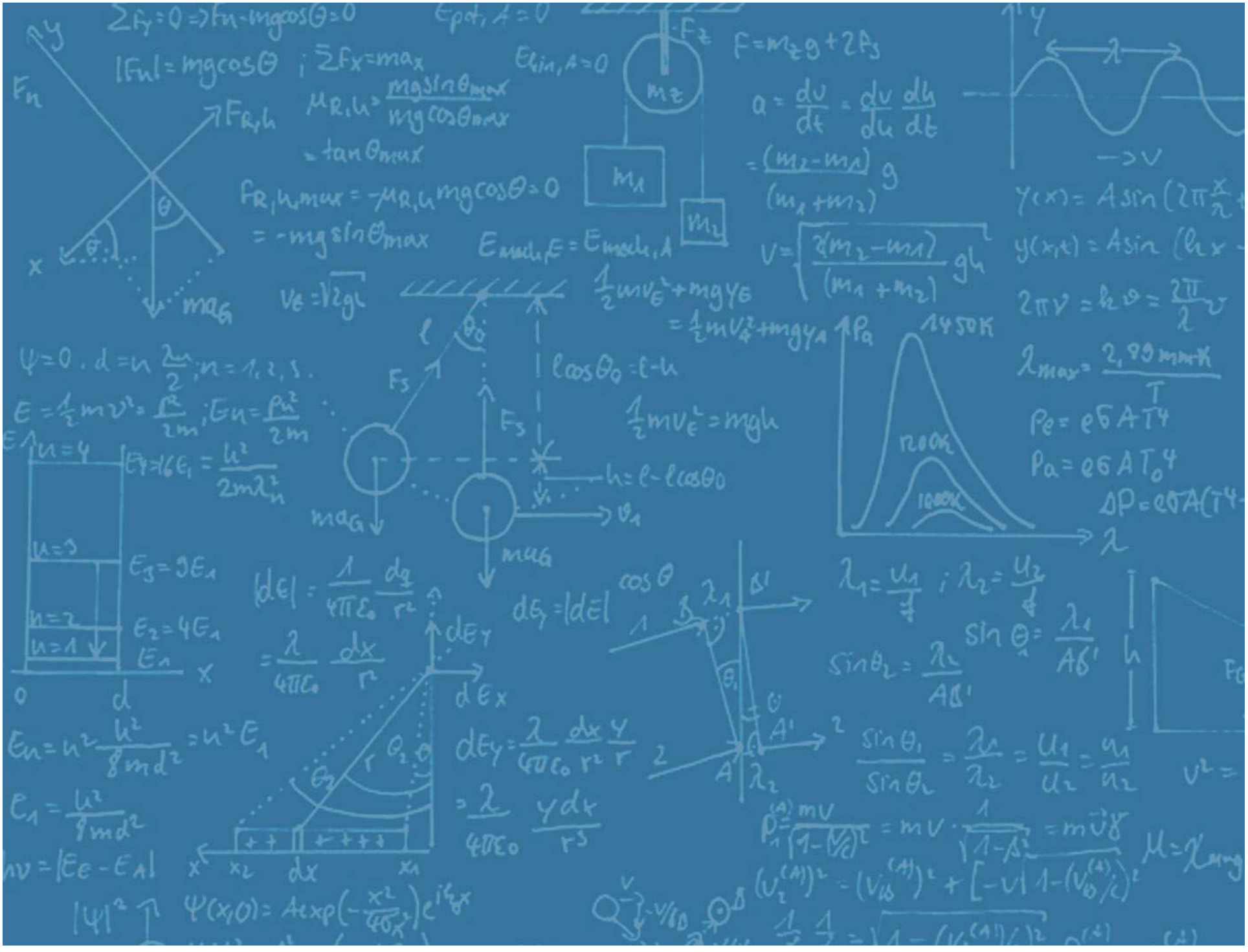
PLENARY SESSION (Salon A)
Chair: Leonid Kunyansky

09:00-09:40 **José A. Iglesias**, University of Twente, The Netherlands
Sparse optimization for total variation and optimal transport regularized inverse problems

MINISYMPOSIUMS

M19: Reconstruction Methods for Inverse Problems and Related Studies (Continued) Chairs: M. Lim, G. Nakamura **Session 3** (09:50-11:30)	**M12: Bayesian, Variational and Stochastic Methods for Uncertainty Quantification in Optimization and Inverse Problems** (Continued) Chairs: A. A. Khan, C.Tammer **Session 5** (09:50-11:30)	**M8: Selected Topics of Inverse Problems** (Continued) Chairs: A.H. Hasanoğlu, C. Sebu **Session** (09:50-11:05)	**M10: Inverse Problems for Fractional Equations** (Continued) Chairs: G. Covi, B. Kaltenbacher **Session 4** (09:50-10:40)
Salon A	**Salon B**	**Salon C**	**Salon D**
Viet Ha Hoang, Nanyang Technological University, Singapore, *Bayesian inversion of eikonal equation* (09:50-10:15)	Alexandra Smirnova, Georgia State University, USA, *Infectious disease modeling: optimization under uncertainty* (09:50-10:15)	Cornel Pintea, Babeș-Bolyai Univ., Romania, *Convex sets and convex optimization via the metric projection* (09:50-10:15)	Yiran Wang, Emory University, USA, *Recover asymptotics of potentials from the scattering of relativistic Schrodinger operators* (09:50-10:15)

Sangwoo Kang, Pusan National Univ., Korea, *Asymp. analysis of the MUSIC algorithm for 3-D electromagnetic scattering by small dielectric inclusions* (10:15-10:40)	Helmut Harbrecht, Universität Basel, Switzerland, *Shape optimization under constraints on the probability of a quadratic functional to exceed a given threshold* (10:15-10:40)	Anjuna Dileep, Hanbat National University, South Korea, *Phase recovery in specific inverse medium scattering problems* (10:15-10:40)	Mukul Dwivedi, Saarland University, Germany, *A numerical method for the fractional Calderon problem* (10:15-10:40)
Sunghwan Moon, Kyungpook Nat. Univ, Korea, *Uniqueness of recovering initial data from boundary measurements for the time-dependent damped wave equation with variable coefficients* (10:40-11:05)	Neil Chada, City University of Hong Kong, China, *Multilevel stochastic derivative-free bilevel optimization* (10:40-11:05)	Ziyun Jin, Fudan Universty, China, *The Calderón problem for quasilinear conductivities of conformally transversally anisotropic media* (10:40-11:05)	
Mandeep Kumar, Indian Institute of Technology, Ropar, India, *Reconstruction of potential and damping coefficients in a semi-linear wave equation* (11:05-11:30)	Diana-Elena Mirciu, Univ.of Klagenfurt, Austria, *On primal-dual algorithms for ill-posed problems* (11:05-11:30)	Gazi Özdemir, Izmir Institute of Technology, Türkiye, *Inverse generalized impedance problem for the modified Helmholtz equation in two dimensions* (11:05-11:30)	

11:30-11:50 **Coffee Break**

M18: Recent Progress in the Variational Optimization Approach and the FEM for the Solution of Inverse Problems Chair: S. Kumarasamy	**M12** (Continued) Chairs: C. Geiersbach, A.A. Khan **Session 6** (11:50-13:05)
Salon A	**Salon B**
Larisa Beilina, Chalmers University of Technology and Gothenburg Univercity, Sweden, *Reconstruction algorithms for applications in microwave thermometry* (11:50-12:15)	Christiane Tammer, Martin-Luther-University of Halle-Wittenberg, Germany, *Nonsmooth nearly convex optimization problems and applications in robustness* (11:50-12:15)
Eric Lindström, Chalmers University of Technology and Gothenburg University, Sweden, *Variational optimization approach for reconstruction of dielectric properties of conductive objects* (12:15-12:40)	Caroline Geiersbach, University of Klagenfurt, Austria, *A maximum probability problem in optimal control* (12:15-12:40)
Anjuna Dileep, Hanbat National University, South Korea, *Identification of the thermal expansion coefficient in the thermoelastic plate equation* (12:40-13:05)	Akhtar A. Khan, Rochester Institute of Technology, USA, *Estimating random coefficients in mixed variational problems: applications to stochastic elasticity imaging sciences* (12:40-13:05)
Georg Frantz Merila Kyhn, Chalmers Univ. of Technology and Gothenburg Univ., Sweden, *Adaptive FEM for reconstructing dielectric properties of malign melanoma in 3D* (13:05-13:30)