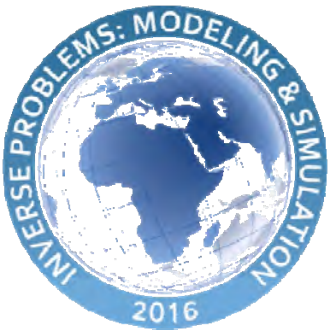
Conference Programme

8th International Conference
"Inverse Problems: Modeling & Simulation"

held on May 23-28, 2016, Ölüdeniz, Fethiye, Turkey

IZMIR UNIVERSITY - 2016



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http://www.ipms-conference.org

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Öludeniz – Fethiye, Turkey
May 23 – 28, 2016

CONFERENCE PROGRAMME

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Welcome

to the 8th International Conference "Inverse Problems: Modeling and Simulation"

May 23- 28, 2016, Öludeniz-Fethiye, Turkey

The First International Conference "Inverse Problems: Modeling and Simulation", sponsored by Fethiye Municipality, Office of Naval Research International Field Office and Naval Undersea Warfare Center (USA), and also by Danish Interdisciplinary Inversion Group (DIIG) (Denmark) was held during July 12 - 21, 2002, in Fethiye, Turkey.

The Second International Conference "Inverse Problems: Modeling and Simulation", sponsored by Fethiye Municipality, international journals "Inverse Problems", " Journal of Inverse and Ill-Posed Problems", "Inverse Problems in Engineering", the Scientific and Technological Research Council of Turkey (TUBITAK) was held during June 07 - 12, 2004, in Fethiye, Turkey.

The Third International Conference "Inverse Problems: Modeling and Simulation", sponsored by Mugla Governorship, the Scientific and Technological Research Council of Turkey (TUBITAK), Öludeniz Municipality, international journals "Inverse Problems", "Journal of Inverse and Ill-Posed Problems", "Inverse Problems in Science and Engineering" was held during May 29 - June 02, 2006, in Oludeniz - Fethiye, Mugla, Turkey.

The Fourth International Conference "Inverse Problems: Modeling and Simulation" was held in Öludeniz (Fethiye, Mugla) during May 26 -30, 2008 and was sponsored by Turkish International Cooperation and Development Agency (TIKA), Mugla Governorship, Ankara Branch of Turkish Mathematical Society, Korfez Municipality, Oludeniz Municipality, international journals "Inverse Problems", "Journal of Inverse and Ill-Posed Problems", "Inverse Problems in Science and Engineering".

The Fifth International Conference "Inverse Problems: Modeling and Simulation" was held during May 24 - 29, 2010, in one of distinguished hotels of the Mediterranean Region, in famous Lykia World & Links Golf Antalya hotel, Antalya, Turkey. The proposed International Conference was under the auspices of the leading international journals, "Inverse Problems in Science and Engineering", "Inverse Problems", "Journal of Inverse and Ill-Posed Problems", and the International Society for Inverse Problems in Science and Engineering (ISIPSE). The organizers of the Conference, in particular the Department of Mathematics and Computer Sciences of Izmir University, worked to put together an excellent scientific program with social activities.

The Sixth International Conference "Inverse Problems: Modeling and Simulation" was held during May 21-26, 2012, in the distinguished hotel of the Mediterranean Region, in famous Lykia World & Links Golf Antalya hotel, Antalya, Turkey. The conference was a success with about 200 participants from more than 35 different countries. The Conference was organized by the Department of Mathematics and Computer Science, Izmir University, under the auspices of the "Inverse Problems in Science and Engineering", "Inverse Problems", "Journal of Inverse and Ill-Posed Problems", "Inverse Problems and Imaging".

The Seventh International Conference "Inverse Problems: Modeling and Simulation" will be held during May 26-31, 2014, in the distinguished hotel Liberty Hotels Lykia, Öludeniz-Fethiye, Turkey. The meeting was supported by the Scientific and Technological Research Council of Turkey (TUBITAK), and sponsored by Izmir University and Doganata Society for Education and Culture. This meeting brought together 172 internationally known speakers and exhibitors from over 35 countries world-wide.

The Eighth International Conference "Inverse Problems: Modeling and Simulation" will be held during May 23–28, 2016, in the distinguished hotel of the Mediterranean Region, in Liberty Hotels, Lykia, Ölüdeniz, Fethiye - Turkey. The conference brings together 160 international speakers and exhibitors from over 32 countries world-wide. The conference programme includes 3 plenary lectures and invited lectures given in the framework of 19 minisymposiums. The main sponsors of the conference are Izmir University, École Polytechnique and The Eurasian Association on Inverse Problems (EAIP).

Organizing Institutions and Sponsors

Main Topics

- Inverse Problems in: mathematics, statistics, engineering, physics, chemistry, biology, medicine, meteorology and computer science;
- Coefficient and source identification problems;
- Imaging techniques;
- Statistical and probabilistic inverse methods;
- Identification in nonlinear differential equations;
- Regularization techniques;
- Inverse scattering;
- Inverse problems in vibration phenomena;
- Identifiability concepts;
- Spectral inversion;
- Computational inverse problems;
- Computer vision;
- Optimization methods;
- Radon transforms and applications;
- Geometric inverse problems

Committees

Chair of the Conference:

- Alemdar Hasanoglu (Hasanov), Izmir University, Turkey

Co-Chairs:

- Sergey I. Kabanikhin, ICM&MG RAS, Novosibirsk, Russia
- Andreas Neubauer, University of Linz, Austria
- Roman Novikov, Ecole Polytechnique, France

International Program Committee:

- Simon Arridge, University College London, UK
- George S. Dulikravich, Florida International University,
- Abdellatif El Badia, University of Technology of Compiègne, France
- Alberto Grünbaum, University of California, USA
- Xu Han, Hunan University, P. R. China
- Dinh Nho Hào, Hanoi Institute of Mathematics, Vietnam
- Uno Hämarik, University of Tartu, Estonia
- Bernd Hofmann, Chemnitz University of Technology, Germany
- Thorsten Hohage, University of Göttingen, Germany
- Akhtar A. Khan, Rochester Institute of Technology, USA
- Daniel Lesnic, University of Leeds, UK
- Alfred K. Louis, Universität des Saarlandes, Germany
- Eric Todd Quinto, Tufts University, USA
- Vladimir G. Romanov, Sobolev Institute of Mathematics, Russia
- Cristiana Sebu, University of Malta, Malta
- Jin Keun Seo, Yonsei University, Korea
- Otmar Scherzer, University of Vienna, Austria
- Marian Slodička, Ghent University, Belgium
- Trong T. Truong, University of Cergy-Pontoise, France
- Ricardo Weder, Universidad Nacional Autónoma de México, Mexico
- Anatoly G. Yagola, Moscow State University, Russia
- Francesco Zirilli, Universita di Roma La Sapienza, Italy

International Organizing Committee:

- Kayhan Erciyeş, Rector of Izmir University, Turkey (Chair)
- Onur Baysal, Izmir University, Turkey
- Mehmet Kurt, Izmir University, Turkey
- Balgaisha Mukanova, Eurasian National University, Astana, Kazakhstan
- Zahir Muradoğlu, Kocaeli University, Turkey
- Burhan Pektaş, Izmir University, Turkey

Conference Manager:

- Pınar Barış (Şahin), Izmir University, Turkey

PROGRAMME OUTLINE

Registration: May 23, 2016, 08:30-09:30 (Congress Center)

MONDAY 23th May, 2016

09:30-10:20	**Opening Ceremony & Award Presentation** (Amphitheatre)			
10:20-11:00	**Plenary Lecture** (Amphitheatre): **Jan Boman,** *Injectivity of generalised Radon transforms,* Stockhom University, Sweden			
11:00-11:20	**Coffee Break**			
	Salon A	**Salon B**	**Salon C**	**Salon D**
11:20-13:20	**M1: Interactions of Inverse Problems and Signal Processing** (*Dedicated to Zuhair M. Nashed*) (Organizers:Willi Freeden, Akhtar Khan, Otmar Scherzer)	**M15: Inverse Problems in Computer Vision** (Organizer: Carola-Bibiane Schönlieb)	**M10: Inverse Problems in Wave Propagation** (Organizer: Thorsten Hohage)	**M13: Computational Inverse Problems** (Organizer: Barbara Kaltenbacher)
13:20-15:00	**Lunch**			
15:00-16:30	**M1** (Continued)	**M15** (Continued)	**M10** (Continued)	**M13** (Continued)
16:30-16:50	**Coffee Break**			
16:50-18:20	**M1** (Continued)	**M15** (Continued)	**M10** (Continued)	**M13** (Continued)
19:30-20:30	**Welcome Party**			

TUESDAY 24th May, 2016

09:00-09:40	**Plenary Lecture** (Amphitheatre): **Ronny Ramlau,** *Inverse problems in adaptive optics systems for extremely large telescopes,* Johannes Kepler University Linz , Austria			
	Salon A	**Salon B**	**Salon C**	**Salon D**
09:45-11:45	**M2: Recent Advances in Ill-Posed Problems and Applications** (*Dedicated Anatoly Yagola*) (Organizer:Bernd Hofmann)	**M7: Regularization and Parameter Choice** (Organizer: Uno Hämarik)	**M6: Optimization Methods for Inverse Problems** (Organizers Akhtar A. Khan, Cristiane Tammer)	**M19: Inverse Problems in Optics** (Organizers: Erik Bonnetier, Faouzi Triki)
11:45-12:00	**Coffee Break**			
12:00-13:30	**M3: Recent Developments in Inverse Problems and Tomography** (*Dedicated E.Todd Quinto*) (Organizers: Ming Jiang, Alfred Louis)	**M7** (Continued)	**M11: Coefficient Identification Problems** (Organizer: Daniel Lesnic)	**M5. Geometric Inverse Problems** (Organizer: Alexandre Jollivet)
13:30-15:00	**Lunch**			
15:00-16:30	**M3** (Continued)	**M4: Recent Developments Regularization Techniques: Theory and Applications** (Organizers: Bernd Hofmann, Andreas Neubauer)	**M11** (Continued)	**M5** (Continued)
16:30-16:50	**Coffee Break**			
16:50-18:20	**M3** (Continued)	**M4** (Continued)	**M11** (Continued)	
20:00-24:00	**Banquet**			

PROGRAMME OUTLINE (Continued)

WEDNESDAY 25th May, 2016			
09:00-09:40	**Plenary Lecture** (Amphitheatre): **Alexandre Jollivet**, *Inverse scattering for classical particles*, Lille 1 University, France		
	Salon A	**Salon B**	**Salon C**
09:45-11:45	**M3: Recent Developments in Inverse Problems and Tomography** (Continued)	**M4: Recent Developments in Regularization Techniques: Theory and Applications** (Continued)	**M12: Statistical Inverse Problems** (Organizer: Frank Werner)
11:45-12:00	**Coffee Break**		
12:00-13:30	**M17: Tomographi Inverse Problems and Applications** (Organizers: Bernadette Hahn, Eric Todd Quinto)	**M4** (Continued)	**M12** (Continued)
13:30-15:00	**Lunch**		
15:00-16:30	**M17** (Continued)	**M4** (Continued)	**M12** (Continued)
16:30-16:50	**Coffee Break**		
16:50-17:50	**M17** (Continued)		**M14:Hybrid Imaging** (Organizer: Leonidas Mindrinos)
THURSDAY 26th May, 2016			
	Salon A	**Salon B**	**Salon C**
09:00-11:30	**M18: Inverse Problems in Vibration Phenomena and Wave Propagation** (Organizers:Alexandre Kawano, Abdelmalek Zine)	**M16: Inverse Source Problems** (Organizers: Cristiana Sebu, Marian Slodicka)	**M14: Hybrid Imaging** (Continued)
11:30-11:45	**Coffee Break**		
11:45-12:45	**M18** (Continued)	**M16** (Continued)	**M8: Generalized Radon Transforms and Applications** (Organizers: Trong T. Troung, Roman Novikov)
12:45-14:00	**Lunch**		
14:00-18:30	**A half-day tour to Saklıkent Canyon**		
FRIDAY 27th May, 2016			
	Salon A	**Salon B**	**Salon C**
09:00-11:30	**M18: Inverse Problems in Vibration Phenomena and Wave Propagation** (Continued)	**M16: Inverse Source Problems** (Continued)	**M8: Generalized Radon Transforms and Applications** (Continued)
11:30-11:45	**Coffee Break**		
11:45-13:15	**M9: Inverse Problems and Applications to Medical Imaging** (Organizer:A.El Badia)	**M16** (Continued)	**M8** (Continued)
13:15-15:00	**Lunch**		
15:00-15:30	**Closing Ceremony. Election of Committee Members (Salon A)** (Amphitheatre)		
15:30-16:00	**Biennial Assembly of the Eurasian Association on Inverse Problems** (Amphitheatre)		
SATURDAY 28th May, 2016			
10:30-18:30	**Boat Tour**		

MONDAY 23th May, 2016

PLENARY SESSION (Amphitheatre)
(**Chairs**: Alfred Louis, Eric Todd Quinto)

10:20-11:00	**Plenary Lecture: Jan Boman,** *Injectivity of generalised Radon transforms,* Stockhom University, Sweden
11:00-11:20	**Coffee Break**

MINISYMPOSIUMS

M1: Interactions of Inverse Problems and Signal Processing (Dedicated to Zuhair M. Nashed) (**Chairs:** Willi Freeden, Volker Michel (11:20-13:00)	**M15: Inverse Problems in Computer Vision** (**Chairs:** Anne-Sophie Macé, Carola-Bibiane Schönlieb) (11:20-13:20)	**M10: Inverse Problems in Wave Propagation** (**Chairs:** Thorsten Hohage, María Luisa Rapún Banzo) (11:20-13:20)	**M13: Computational Inverse Problems** (**Chairs**: Bangti Jin, Liviu Marin) (11:20-13:20)
Salon A	**Salon B**	**Salon C**	**Salon D**
Otmar Scherzer, Univ. of Vienna, Austria, *Zuhair M. Nashed: personal pictures* (11:20-11:30)	**Clemens Kirisits**, Univ. of Vienna, Austria, *Convective regularization for optical flow* (11:20-11:50)	**Roman Novikov**, École Polytechnique Paris, France, *Inverse scattering without phase information* (11:20-11:50)	**Simon Rabanser**, Univ. of Innsbruck, Austria, *Single stage reconstruction algorith in quantitative photoacoustic tomography* (11:20-11:50)
Akhtar A. Khan, Rochester Ins. of Technology, USA, *Regularization of ill-posed problems* (11:30-12:00)	**Talal Rahman**, Bergen University College, Norway, *A new versatile variational model for surface* (11:50-12:20)	**Tilo Arens**, Karlsruhe Inst. of Technology, Germany, *On non-scattering inhomogeneities for electro-magnetic* (11:50-12:20)	**Hend Ben Ameur**, Univ. of Tunis, Tunisia, *Identification of parameters, fractures and wells in a porous media* (11:50-12:20)
Volker Michel, University of Siegen, Germany, *A generalization of the Backus-Gilbert method* (12:00-12:30)	**Yves van Gennip**, Univ. of Nottingham,UK, *Graph based techniques for image segmentation* (12:20-12:50)	**Damien Fournier**, Univ. of Göttingen, Germany, *Parameter identification for the Helmholtz equation from limited observations in helio-seismology* (12:20-12:50)	**Christoph Rügge**, Univ. of Göttingen, Germany, *Convergence of discrete, spatially regularized diffusion MRI reconstructions* (12:20-12:50)
Christian Gerhards, University of Vienna, Austria, *Localization and inverse spherical magnetization problems* (12:30-13:00)	**Lavdie Rada**, Bahcesehir Univ., Turkey, *An improved model for joint egmentation and registration based on linear curvature smoother* (12:50-13:20)	**Olha Ivanyshyn Yaman**, Izmir Ins. of Technology, Turkey, *Reconstruction method for PEC obstacles in R3* (12:50-13:20)	**Alexander Litvinenko**, King Abdullah Univ. of Science and Tech., SA, *Approximation of nonlinear Bayesian update for inverse problems* (12:50-13:20)
Lunch			
M1 (Continued) (**Chairs:** Akhtar Khan, Volker Michel) (15:00-16:30)	**M15** (Continued) (**Chairs:** Lavdie Rada, Talal Rahman) (15:00-16:30)	**M10** (Continued) (**Chairs:** Tilo Arens, Olha Ivanyshyn Yaman) (15:00-16:30)	**M13** (Continued**)** (**Chairs:** Hend Ben Ameur Alexander Litvinenko) (15:00-16:30)
Salon A	**Salon B**	**Salon C**	**Salon D**
Joachim Gwinner, Univ. der Bundeswehr Munchen, Germany, *An optimization regularization approach to parameter identification in frictional contact problems* (15:00-15:30)	**Xiahao Cai**, Univ. College London, UK, *Wavelet-based segmentation on the sphere* (15:00-15:30)	**Simon Maretzke**, Univ. of Göttingen, Germany, *Stability estimates for coherent propagation imaging of compactly supported objects well-posed phase retrieval problem* (15:00-15:30)	**Carola-Bibiane Schönlieb,** Univ. of Cambridge, UK, *Discrete gradients for computing inverse imaging solutions* (15:00-15:30)
Franco Tomarelli,Politecnico Milano, Italy, *Variational approach to image segmentation and inpainting* (15:30-16:00)	**Hendrik Dirks**, Univ. of Münster, Germany, *Optical-flow based dynamic imaging methods* (15:30-16:00)	**Maria Luisa Rapún**, Polyt. Univ.of Madrid, Spain,*Topological derivatives for invers scattering problems in attenuating media* (15:30-16:00)	**Bangti Jin**, Univ. College London, UK, *Linearized inverse problem in multifrequency electrical impedance tomography* (15:30-16:00)

Ilker Kocyigit, Univ. of Michigan, USA, *Incorporating sparsity assumptions to array imaging* (16:00-16:30)	**Anne-Sophie Macé**, Paris Descartes & Bioaxial, France, *Robust reconstruction of sparse solutions of ill-posed IPs with applications to superresolution microscopy* (16:00-16:30)	**Frederic Weidling**, Univ. of Göttingen, Germany, *Variational source conditions and stability estimates for inverse electromagnetic medium scattering problems* (16:00-16:30)	**Renier Mendoza**, Univ. of the Philippines Diliman, *A two-phase segmentation approach to the impedance tomography problem* (16:00-16:30)
Coffee Break			
M1 (Continued) (**Chairs:** Christian Gerhards, Otmar Scherzer (16:50-18:20)	**M15** (Continued) (**Chairs:** Hendrik Dirks, Clemens Kirisits) (16:50-17:50)	**M10** (Continued) (**Chairs:** Simon Maretzke Frederic Weidling (16:50-17:20)	**M13** (Continued) (**Chairs:** Renier Mendoza, Christoph Rügge) (16:50-17:50)
Salon A	**Salon B**	**Salon C**	**Salon D**
Ruben Spies, IMAL, UNL, CONICET, FIQ, Argentina, *Mixed curvature-based diffusion models for local image inpainting* (16:50-17:20)	**Luca Calatroni**, Univ. degli Studi di Genova, Italy, *A nototal variation denoising model for mixed noise removal* (16:50-17:20)	**Jakob Rezac**, Univ. of Delaware, USA, *Quasi-backscattering in qualitative inverse scattering* (16:50-17:20)	**Liviu Marin**, Univ.of Bucharest, Romania, *A meshless fading regularization method for inverse BVPs in elasticity* (16:50-17:20)
Naime Ozben,Turkish-German Univ., Turkey, *Sparse synthetic aperture radar imaging and model error correction* (17:20-17:50)	**Carolin Rossmanith**, Univ. of Münster, Germany, *Optimal transportation networks as Mumford-Shah-type optimisation problems* (17:20-17:50)		**Julia Seydel**, Saarland Univ. Germany, *Identifying the stored energy function of a hyperelastic material from full knowledge of the displacement field* (17:20-17:50)
Willi Freeden, Univ. of Kaiserslautern, Germany, *Recovery problems: Zuhair's concepts and strategies* (17:50-18:20)			

TUESDAY 24th May, 2016

PLENARY SESSION (Amphitheatre)
(**Chairs**: Andreas Neubauer, Jens Flemming)

09:00-09:40 **Plenary Lecture: Ronny Ramlau,** *Inverse problems in adaptive optics systems for extremely large telescopes*, Johannes Kepler University, Linz, Austria

MINISYMPOSIUMS

M2: Recent Advances in Ill-Posed Problems and Applications (Dedicated to Anatoly Yagola) (**Chair:** Marian Slodicka) (09:45-11:45)	**M7: Regularization and Parameter Choice** (**Cha** Uno Hämarik, Toomas Raus) (09:45-11:45)	**M6: Optimization Methods forInverse Problems** (**Chairs:** Akhtar A. Khan, Christiane Tammer) (09:45-11:45)	**M19: Inverse Problems in Optics** (**Chairs**: Ali Mostafazadeh, Faouzi Triki) (09:45-11:45)
Salon A	**Salon B**	**Salon C**	**Salon D**
Gulnara Kuramshina, Lomonosov Moscow State Univ., Russia, *Regularization procedures for biological molecules force field calculations* (09:45-10:15)	**Robert Plato**, Univ. of Siegen, Germany, *The repeated midpoint rule for weakly singular Volterra equations of the first kind with noisy data* (09:45-10:15)	**Elisabeth Köbis**, Univ. of Erlangen-Nuremberg, Germany, *Uncertain optimization problems: An application of inverse problem* (09:45-10:15)	**Margaux Vauthrin**, Grenoble-Alpes Univ., France, *Photoacoustic imaging in a piecewise constant medium* (09:45-10:15)
Dinh Nho Hào, Hanoi Inst. of Mathematics, Vietnam, *Determination of the initial condition in parabolic equations from boundary observation* (10:15-10:45)	**Carola-Bibiane Schönlieb,** Univ. of Cambridge, UK, *The repeated midpoint rule weakly singular Volterra equations of the first kind with noisy data* (10:15-10:45)	**Christiane Tammer**, Univ.of oHalle-Wittenberg, Germany, *Necessary conditions in muli-objective approximation theory and applications for inverse problems* (10:15-10:45)	**Ali Mostafazadeh**, Koc Univ., Turkey, *Dynamical transfer matrices, unidirectional invisibility and single-mode inverse scattering* (10:15-10:45)

Jens Flemming, TU Chemnitz, Germany, *Sparsity promoting regularization without sparsity assumption* (10:45-11:15)	**Urve Kangro**, Univ. of Tartu, Estonia, *Solution of first kind cordial Volterra integral equations with noisy data* (10:45-11:15)	**Aref Lakhal**, Univ. of Saarlandes, Germany, *A direct method for nonlinear inverse problems* (10:45-11:15)	**Axel Osses**, Univ. de Chile, Chile, *A source null- control based reconstruction formula using single internal measu rements. Applications to heat and Stokes source identification* (10:45-11:15)
Anatoly Yagola, Lomonosov Moscow State Univ., Russia, *A priori and a posteriori error estimates for solutions of ill-posed problems* (11:15-11:45)	**Kazimierz Reginski**, Inst. Elektron Technology, Poland *Regularization method for determining laser beam quality parameters* (11:15-11:45)	**Akhtar A. Khan**, Rochester Inst. of Technology, USA, *Parameter identification in variational and quasi-variational inequalities* (11:15-11:45)	**Chun-Hsiang Tsou**, Grenoble-Alpes Univ., France, *Inverse conductivity problem: a stable method to determine disks* (11:15-11:45)

Coffee Break

M3: Recent Developments in Inverse Problems and Tomography (Dedicated to E.Todd Quinto) (**Chairs:** Ming Jiang, Alfred Louis) (12:00-13:30)	**M7** (Continued) (**Chairs:** Urve Kangro, Robert Plato) (12:00-13:30)	**M11: Coefficient Identification Problems** (**Chairs:** Russell Davies, Daniel Lesnic) (12:00-13:30)	**M5: Geometric Inverse Problems** (**Chairs:** Alexandre Jollivet, François Monard) (12:00-13:30)
Salon A	**Salon B**	**Salon C**	**Salon D**
Frank Natterer, Univ. Münster, Germany, *Sonic reflection imaging* (12:00-12:30)	**Uno Hämarik**, Univ. of Tartu, Estonia, *On comparison of accuracy of approximate solutions of operator equations with noisy data* (12:00-12:30)	**Paul Sacks**, Iowa State Univ., USA, *Transmission inverse problem with reduced information about the source* (12:00-12:30)	**Michele Di Cristo**, Politecnico di Milano, Italy, *A stability result for quantitative photoacoustic tomography* (12:00-12:30)
Andreas Rieder, Karlsruhe Inst. of Technology, Germany, *An abstract ramework for inverse wave problems with applications* (12:30-13:00)	**Toomas Raus**, Univ. of Tartu, Estonia, *Choice of the regularization parameter using local minimum points of the quasioptimality function* (12:30-13:00)	**Nina Avdonina**, Univ. of Alaska Fairbanks, USA, *Inverse problems for the wave equation on graphs* (12:30-13:00)	**Francis Chung**, University of Kentucky, USA, *Inverse problems for the radiative transport equation* (12:30-13:00)
Bernadette Hahn, Univ. of Würzburg, Germany, *Singular feature extraction in dynamic imaging* (13:00-13:30)	**Marek Kojdecki**, Warsaw Military Univ. of Technolo –gy, Poland, *Algorithms for iteratitive a-posteriori choice of parameter in Tikhonov's regularisation* (13:00-13:30)	**Carlos Minutti**, Nat. Aut. Univ.of Mexico, Mexico, *A methodology for the characterization of naturally fractured-vuggy cabonate reservoirs usıng statistical methods* (13:00-13:30)	**Aleksander Denisiuk**, University of Warmia and Mazury, Poland, *Integral geometry of complexes of lines in R^n* (13:00-13:30)

Lunch

M3 (Continued) (**Chairs:** Bernadette Hahn, Andreas Rieder) (15:00-16:30)	**M4: Recent Developments in Regularization Techniques: Theory and Applications** (**Chairs:** Andreas Neubauer, Markus Grasmair) (15:00-16:30)	**M11** (Continued) (**Chairs:** Daniel Lesnic, Paul Sacks) (15:00-16:30)	**M5** (Continued) (**Chairs:** Christoph Rügge, Renier Mendoza) (15:00-16:00)
Salon A	**Salon B**	**Salon C**	**Salon D**
Jan Boman, Stockhom Univ., Sweden, *The analytic wave front set and the Radon transform* (15:00-15:30)	**Teresa Reginska**, Inst. of Mathematics, Poland, *Regularization of ill-posed problems via regularization their discretization* (15:00-15:30)	**Russell Davies**, Univ. of Cardiff, UK, *The Stieltjes continued fraction and the simultaneous determination of creep and relaxation coefficients* (15:00-15:30)	**François Monard,** Univ.of Washington, USA, *The geodesic X-ray transform on surfaces with conjugate points or trapping* (15:00-15:30)

Otmar Scherzer, Univ. of Vienna, Austria, *Integral invariants in computer vision and the relation to the spherical mean operator* (15:30-16:00**)**	**Steven Bürger**, TU Chemnitz, Germany, *On complex-valued deautoconvolution of compactly supported functions with sparse Fourier representation* (15:30-16:00)	**Sergei Avdonin**, Univ. of Alaska Fairbanks, USA, *Inverse problems for Krein's string* (15:30-16:00)	**Sombuddha Bhattacharyya** Tata Inst. of Fund. Res. Centre for Appl. Math., India, *Calderon-type inverse problems on Riemannian manifolds* (15:30-16:00)
Gaël Rigaud, Saarland Univ., Gemany, *On analytic-cal solutions to beam-hardening* (16:00-16:30)	**Daniel Gerth**, Johannes Kepler Univ., Linz, Austria, *Lifting deterministic regularization results into the stochastic setting* (16:00-16:30)	**Murat Sat**, Erzincan Univ., Turkey, *An inverse spectral problem for a convolution integro-differential operator* (16:00-16:30)	

Coffee Break

M3(Continued) (**Chairs:**Gaël Rigaud Otmar Scherzer)(16:50-18:20)	**M4** (Continued) (**Chairs:** Daniel Gerth, Teresa Reginska) (16:50-17:20)	**M11** (Continued) (**Chairs:** Daniel Lesnic, Carlos Minutti) (16:50-17:50)
Salon A	**Salon B**	**Salon C**
Ozan Öktem, Royal Inst. of Technology Stockholm, *Shape based reconstruction for inverse problems in imaging* (16:50-17:20)	**Stephan Anzengruber**, RICAM, Linz, Austria, *Tikhonov regularization with weighted discrepancy term in complex deautoconvolution* (16:50-17:20)	**Anar Rahimov**, The Inst. of Control Systems, NAS of Azerbaijan, *Num.solution to a class of inverse source problems for a parabolic equation with integral overdetermination* (16:50-17:20)
Holger Kohr, Royal Inst. of Technology Stockholm, *ODL-a rapid prototyping framework for inverse problems* (17:20-17:50)		**Manmohan Vashisth,** Tata Inst.of Fund. Res. Centre for Appl. Math., India, *Inverse problems for the wave equation with undetermined* data (17:20-17:50)
Rohit K. Mishra, Tata Inst. of Fund. Res. Centre for Appl. Math., India, *Explicit and microlocal inversion of restricted ray transform in R^n* (17:50-18:20)		

WEDNESDAY 25th May, 2016

PLENARY SESSION (Amphitheatre)
(**Chairs**: Roman Novikov, Markus Haltmeier)

09:00-09:40	**Plenary Lecture: Alexandre Jollivet**, *Inverse scattering for classical particles,* Université de Lille 1, France

MINISYMPOSIUMS

M3: Recent Developments in Inverse Problems and Tomography (Continued) (**Chairs:** Alfred Louis, Ozan Öktem) (09:45-11:45)	**M4: Recent Developments in Regularization Techniques: Theory and Applications** (Continued) (**Chairs:** Steven Bürger Andreas Neubauer) (09:45-11:45)	**M12: Statistical Inverse Problems** (**Chairs:** Fabian Clemens Dunker, Frank Werner (09:45-11:45)
Salon A	**Salon B**	**Salon C**
Ming Jiang, Peking Univ., China, *Recent advances in accelerating x-ray tomography reconstruction with Mumford- Shah regularization* (09:45-10:15)	**Otmar Scherzer**, Univ. of Vienna, Austria, *Generalized convergence rates results for linear inverse problems in Hilbert spaces* (09:45-10:15)	**Ralf Hielscher**, Chemnitz Univ. of Technology, Germany, *Kernel density estimation on the rotation group* (09:45-10:15)
Thomas Schuster, Saarland Univ., Gemany, *An improved inversion formula for the 3D cone beam transform of vector fields* (10:15-10:45)	**Thorsten Hohage**, Univ. of Göttingen, Germany, *Variational source conditions, maxisets, and conditional stability estimates* (10:15-10:45)	**Hanne Kekkonnen**, Univ. of Warwick, UK, *Posterior consistency and convergence rates for Bayesian inversion* (10:15-10:45)
Esther Klann, TU Berlin, Germany, *Topological derivatives for domain functionals with an application to tomography* (10:45-11:15)	**Robert Plato**, Univ.of Siegen, Germany, *The balancing principle for the numerical quadrature of first kind Volterra integral equations* (10:45-11:15)	**Katharina Proksch**, Univ. of Göttingen, Germany, *Multiscale scanning in inverse problems with applications to nanobiophotonics* (10:45-11:15)

David Finch, Oregon State Univ., USA, *Microlocal analysis of the broken ray transform* (11:15-11:45)	**Vinicius Albani**, Univ. of Vienna, *Optimal convergence rates results for linear inverse problems in Hilbert spaces* (11:15-11:45)	**Johannes Schmidt-Hieber**, Univ. of Leiden, NL, *Optimal Gaussian approximation of Poisson data* (11:15-11:45)
Coffee Break		
M17: Tomographic Inverse Problem and Applications (**Chairs:** Bernadette Hahn, Eric Todd Quinto) (12:00-13:30)	**M4** (Continued) (**Chairs:** Vinicius Albani, Robert Plato) (12:00-13:30)	**M12** (Continued) (Chairs: Ralf Hielscher, Frank Werner) (12:00-13:30)
Salon A	**Salon B**	**Salon C**
Alfred Louis, Saarland Univ., Germany, *Sonic reflection imaging* (12:00-12:30)	**Andreas Neubauer**, Univ. of Linz, Austria, *Some generalizations for Landweber iteration for nonlinear ill-posed problems in Hilbert scales* (12:00-12:30)	**Mihaela Pricop-Jeckstadt**, TU Dresden, Germany, *Estimating the usual dietary intake in nutritional epidemiology: statistical challenges and a new two-step approach* (12:00-12:30)
Sean Holman, Univ. of Manchester, UK, *Stability of the geodesic ray transform in the presence of caustics* (12:30-13:00)	**Adrian Martin**, Univ. of Graz, Austria, *Variational regularization methods for advanced magnetic resonance imaging problems*(12:30-13:00)	**Fabian Clemens Dunker**, Univ. of Göttingen, Germany, *Multiscale tests for shape constraints in linear random coefficient models* (12:30-13:00)
Plamen Stefanov, Purdue Univ., USA, *Support theorems for the light ray transform* (13:00-13:30)	**Markus Grasmair**, NTNU, Norway, *Multiparameter sparse regularisation for unmixing problems* (13:00-13:30)	**Kolyan Ray**, Univ. of Leiden, NL, *Minimax theory for a class of non-linear statistical inverse problems* (13:00-13:30)
Lunch		
M17 (Continued) (**Chairs:** Bernadette Hahn, Andreas Rieder) (15:00-16:30)	**M4:** (Continued) (**Chairs:** Andreas Neubauer, Robert Plato) (15:00-16:30)	**M12** (Continued) (**Chairs:** Fabian Clemens Dunker, Frank Werner (15:00-16:30)
Salon A	**Salon B**	**Salon C**
Bastian von Harrach, Goethe Univ. Frankfurt, Germany, *Detecting stochastic inclusions in electrical impedance tomography* (12:00-12:30)	**Christian Gerhards**, Univ. of Vienna, Austria, *On the parameter choice for some joint inversion problems* (15:00-15:30)	**Markus Grasmair**, NTNU, Norway, *The multiresolution norm for statistical inverse problems* (15:00-15:30)
Matias Courdurier, Pontificia Univ. Catolica de Chile, Chile, *Reconstructing the source and attenuation in SPECT using ballisting and scattering measurements* (15:30-16:00)	**Daniela Saxenhuber**, Univ. of Linz, Austria, *Efficient reconstruction algorithms for atmospheric tomography* (15:30-16:00)	**Vilda Purutçuoğlu**, METU, Turkey, *Bayesian inference of deterministic MAPK/ERK pathway via reversible jumps Monte Carlo method* (15:30-16:00)
Francois Monard, Univ. of Michigan, USA, *Efficient tensor tomography in fan-beam coordinates* (16:00-16:30)	**Jens Tepe**, Saarland Univ., Germany, *On a modified ART for terahertz tomography* (16:00-16:30)	**Konstantin Eckle**, Univ. of Bochum, Germany, *Multiscale inference for a multivariate density in deconvolution* (16:00-16:30)
Coffee Break		
M17 (Continued) (**Chairs:** Matias Courdurier, Bastian von Harrach) (16:50-17:50)	**M14: Hybrid Imaging** (**Chairs:** Leonid Mindrinos, Anna Trull) (16:50-17:50)	
Salon A	**Salon C**	
Joonas Ilmavirta, Univ. of Jyväskylä, Finland, *Quantum mechanical tomography and neutrino oscillation* (16:50-17:20)	**Kamran Sadiq**, RICAM, Austria, *Photoacoustic tomography model with varying material density and variable bulk modulus. I* (16:50-17:20)	
Steven Oeckl, Fraunhofer Inst. for Integrated Circuits IIS, Germany, *Advances in Industrial CT* (17:20-17:50)	**Alexander Beigl**, Univ. of Vienna, Austria, *Photoacoustic tomography model with varying material density and variable bulk modulus. II* (17:20-17:50)	

THURSDAY 26th May, 2016

MINISYMPOSIUMS

M18: Inverse Problems in Vibration Pheomena and Wave Propogation (**Chairs:** Alexandre Kawano, Zhihai Xiang) (09:00-11:30)	**M16: Inverse Source Problems** (**Chairs:** Cristiana Sebu, Marian Slodicka) (09:00-11:30)	**M14: Hybrid Imaging** (Continued) (**Chairs:** Leonid Mindrinos, Kamran Sadiq) (09:00-11:30)
Salon A	**Salon B**	**Salon C**
Abdelmalek Zine, Ecole Centrale Lyon, France, *Identification of a parameter related to the longitudinal movement of a long cable* (09:00-09:30)	**Karel Van Bockstal**, Univ. of Ghent, Belgium, *Recovery of a space-dependent vector source in an anisotropic thermoelastic system* (09:00-09:30)	**Anna Trull**, Delft Univ. of Technology, NL, *Optical tomographic image reconstruction with spatially varying point spread function* (09:00-09:30)
Alemdar Hasanov, Izmir Univ., Turkey, *Internal measured output data and transmission adjoint problems: source identification problems for Euler-Bernoulli beam* (09:30-10:00)	**Balgaisha Mukanova**, L. N. Gumilyov Eurasian National Univ., Kazakhstan, *Non-iterative methods of solving inverse source problems in wave equation* (09:30-10:00)	**Michael Apostolopoulos**, Univ. of. Grete, Greece, *A comparative study of imaging methods in strongly scattering media* (09:30-10:00)
Daniel Lesnic, University of Leeds, UK, *Force identification in the wave equation* (10:00-10:30)	**Abdellatif El Badia**, Univ. of Technology of Compiègne, France, *Direct algorithms for solving some inverse source problems in 2D elliptic equations* (10:00-10:30)	**Faouzi Triki**, Joseph Fourier Univ., France, *Global stability estimates for the photoacousting imaging in layered media* (10:00-10:30)
Adriano Cezaro, Univ. Federal Rio Grande do Sul – UFRGS, Brazil, *Regularization approaches for photoacoustic tomography* (10:30-11:00)	**Bolatbek Rysbaiuly**, Int. Univ.of Inform. Tech., Kazakhstan, *An iterative method for reconstraction of thermal characteristics of the rock mass with inaccurate initial data* (10:30-11:00)	**Thomas Haberkorn**, Univ. of Orleans, France, *An optimal control problem in photoacoustic tomography* (10:30-11:00)
Celso Morooka, Unicamp, Brazil, *Dynamics of a vertical pipe and numerical simulations compared with test results in a water tank* (11:00-11:30)	**Burhan Pektas**, İzmir Univ., Turkey, *Identification of spatial and time dependent loads in a variable coefficients wave equation from Neumann type measured data* (11:00-11:30)	**Cong Shi**, Univ. of Vienna, Austria, *A reconstruction method for photoacoustic tomography in attenuation* (11:00-11:30)
Coffee Break		
M18 (Continued) (**Chairs**: Celso Morooka, Abdelmalek Zine) (11:45-12:45)	**M16** (Continued) (**Chairs:** Karel Van Bockstal, Marian Slodicka) (11:45-12:45)	**M8: Generalized Radon Transforms and Applications** (**Chairs:** Roman Novikov, Alfred Puro) (11:45-12:45)
Salon A	**Salon B**	**Salon C**
Alexandre Kawano, Univ. of Sao Paulo–USP, Brazil, *Application of almost periodic distributions to uniqueness problems concerning the vibration of Euler-Bernoulli beams* (11:45-12:30)	**Cristiana Sebu**, Univ. of Malta, Malta, *Identification of separable sources for advection-diffusion equations with variable diffusion coefficient from boundary measured data* (11:45-12:30)	**Michael Quellmalz**, TU Chemnitz, Germany, *A generalization of the spherical Radon transform to circles passing through a fixed point* (11:45-12:30)
Mohamed Ichchou, Centrale Lyon, France, *Inverse energy models for structural-acoustic problems* (12:30-13:00)	**Lukas Neumann**, Univ. of Innsbruck, Austria, *Inverse source problems related to transfer equation and photoacoustic tomography* (12:30-13:00)	**Fatma Terzioglu**, Texas A&M University, USA, *Some inversion formulas for the cone transform* (12:30-13:00)

FRIDAY 27th May, 2016

MINISYMPOSIUMS

M18: Inverse Problems in Vibration Pheomena and Wave Propogation (Continued) (**Chairs:** Celso Morooka, Alexandre Kawano) (09:00-11:30)	**M16: Inverse Source Problems** (Continued) (**Chairs:** Balgaisha Mukanova, Cristiana Sebu) (09:00-11:30)	**M8: Generalized Radon Transforms and Applications** (Continued) (**Chairs:** Roman Novikov, Fatma Terzioglu) (09:00-11:30)
Salon A	**Salon B**	**Salon C**
Zhihai Xiang, Tsinghua Univ., China, *Identify the gradient prestresses with the sparse full wave inversion method* (09:00-09:30)	**Jozef Kačur**, Comenius Univ., Slovakia, *Numerical modelling and scaling filtration properties of porous media* (09:00-09:30)	**Markus Haltmeier**, Univ. of Innsbruck, Austria, *Inversion of conical Radon transforms with orthogonal axis* (09:00-09:30)
Onur Baysal, Izmir Univ., Turkey, *Numerical methods for spatial and temporal inverse source problems for Euler-Bernoulli beam* (09:30-10:00)	**Marian Slodicka**, Univ. of Ghent, Belgium, *Recovery of a time convolution kernel in a semilinear parabolic PDE* (09:30-10:00)	**Rim Gouia-Zarrad**, American University of Sharja, UAE, *Reeconstructing a function from its conical Radon transform* (09:30-10:00)
Xiaofeng Xue, Xi'an Jiaotong Univ., China, *Load identification in one dimensional structure based on hybrid finite element method* (10:00-10:30)	**Katarina Siskova**, Univ. of Ghent, Belgium, *An inverse source problem in semilinear time-fractional diffusion equation* (10:00-10:30)	**Alfred Puro**, Information Science Institute, Tallin, Estonia, *Optical tensor tomography in experimental mechanics* (10:00-10:30)
Olivier Bareille, Ecole Centrale Lyon, France, *Identification of distributed structural singularities patterns: sensitivity of energy based indicators for structural health monitoring* (10:30-11:00)	**Zhanat Karashbayeva**, Int. Univ. of Information Tech., Kazakhstan, *Inverse problems of heat and mass transfer in multilayered enclosing constructions* (10:30-11:00)	**Souvik Roy**, International Centre for Theoretical Sciences-TIFR, India, *Inversion of spherical Radon transform in a spherical shell* (10:30-11:00)
Feda İlhan, Kocaeli Univ., Turkey, *Determination of an unknown elastic modulus in an elastoplastic bending plate based on maximal deflection* (11:00-11:30)	**A. H. Salehi Shayegan**, K. N. Toosi Univ. of Technology, Iran, *Analysis of the quasi-solution of the backward time fractional diffusion equation* (11:00-11:30)	**Sunghwan Moon**, Ulsan National Inst.e of Science and Technology, Korea, *Exact inversions of the cone transforms arising in an application of Compton cameras* (11:00-11:30)
Coffee Break		
M9: Inverse Problems and Applicatio to Medical Imaging (**Chairs**: Abdelatif El Badia, Burhan Pektas) (11:45-13:15)	**M16** (Continued) (**Chairs:** Lukas Neumann, Marian Slodicka) (11:45-12:45)	**M8: Generalized Radon Transforms and Applications** (Continued) (**Chairs:** Roman Novikov, Souvik Roy) (11:45-12:15)
Salon A	**Salon B**	**Salon C**
Rabia Djelouli, California State Univ., USA, *Retrieving the shape in an inverse elasto-acoustic scattering problem: A mathematical investigation and a multi-step solution methodology* (11:45-12:15)	**Fernando Brambila**, UNAM, México, *Inverse problems for fractional partial differential equations. An application to the petroleum industry* (11:45-12:15)	**Christian Jeanguillaume**, Univ. d'Angers, France, *Very large hole emission tomography (CACAO) a better suited model for SPECT than Radon Transform* (11:45-12:15)
Frédérique Le Louer, Univ. of Technology of Compiegne, France, *Material derivatives of boundary integral operators in electromagnetism and applications* (12:15-12:45)	**Michal Galba**, Ghent Univ., Belgium, *Identification of a time-dependent source by use of a 2D-measurement in quasi static Maxwell's equations* (12:15-12:45)	
Malal Diallo, UPJV, France, *An inver-se dipole EEG source problem in neonates* (12:45-13:15)		
Closing Ceremony. Election of Committee Members (Salon A) (Amphitheatre) (**15:00-15:30**)		
Biennial Assembly of the Eurasian Association on Inverse Problems (Amphitheatre) (**15:30-16:00**)		