



DVR 0065528

Workshop on

"Theoretical and Applied Computational Inverse Problems"

organized by

Liliana Borcea, Otmar Scherzer, John C. Schotland

May 5 - 16, 2014

Workshop Schedule, Week 2: May 12 - 15, 2014

• Monday, May 12, 2014

09:30 – 10:30 **Martin Hanke** *Multi frequency MUSIC for impedance imaging*

10:30 – 11:00 *coffee break*

11:00 – 12:00 **Plamen Stefanov** *Traveltime tomography with partial data*

12:00 - 14:00 lunch break

14:00 – 15:00 **Habib Ammari** *Emerging imaging approaches in medicine*

15:00 – 15:30 **Roman Andreev** On simultaneous flux/source identification

• Tuesday, May 13, 2014

09:30 – 10:30 **Miguel Moscoso** *Imaging with sparsity promoting optimization*

10:30 – 11:00 coffee break

11:00 – 12:00 **Liliana Borcea** *Imaging in complex environments*

12:00 - 14:00 lunch break

14:00 – 15:00 Alexander Novikov

Imaging of sparse scatterers

15:00 – 15:30 Konstantinos Kalimeris Attenuating models and reconstruction methods in Photoacoustic Imaging

• Wednesday, May 14, 2014

09:30 – 10:30 **Barbara Kaltenbacher** *Regularization by discretization: recent convergence results and multilevel strategies*

10:30 – 11:00 *coffee break*

11:00 – 12:00 Vladimir Druskin

Finite-difference Gaussian quadrature rules for Dirichlet-to-Neumann Operators and inverse problems

12:00 - 14:00 lunch break

14:00 – 15:00 **Ricardo Alonso** *Electromagnetic wave propagation in random waveguides*

15:00 – 16:00 **Ronny Ramlau** Inverse Problems in Adaptive Optics

• Thursday, May 15, 2014

09:30 – 10:30 Alexandru C. Tamasan Uniqueness and nonuniqueness in Current Density Impedance Imaging with one current density information

10:30 – 11:00 coffee break
11:00 – 12:00 Shari Moskow
Inverse Born series for the Calderon problem and related inverse problems

 $12{:}00-14{:}00\ lunch\ break$

14:00 – 15:00 **John C. Schotland** *Acousto-Optic Imaging*

15:00 – 16:00 **Discussion**

All lectures take place in the ESI Boltzmann Lecture Hall