

Workshop on
“Theoretical and Applied Computational Inverse Problems”
organized by

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May 5 - 16, 2014

Workshop Schedule, Week 1: May 5 - 9, 2014

• **Monday, May 5, 2014**

09:00 **Opening & Registration**

09:30 – 10:30 **Lenya Ryzhik**

Waves in weakly random media, I

10:30 – 11:00 *coffee break*

11:00 – 12:00 **Lenya Ryzhik**

Waves in weakly random media, II

12:00 *lunch break*

15:00 – 16:00 **Lauri Oksanen**

Computational approaches to the Boundary Control method

16:00 – 16:30 **Peter Elbau**

A Model for Photoacoustic Sectional Imaging

• **Tuesday, May 6, 2014**

09:30 – 10:30 **Lenya Ryzhik**

Waves in weakly random media, III

10:30 – 11:00 *coffee break*

11:00 – 12:00 **Lenya Ryzhik**

Waves in weakly random media, IV

12:00 *lunch break*

15:00 – 16:00 **Josselin Garnier**

Correlation-based imaging with moving sensors

16:00 – 16:30 **Thomas Widlak**

Stability in linearized elastography

• **Wednesday, May 7, 2014**

09:30 – 10:30 **Chrysoula Tsogka**

Signal to Noise Ratio analysis in passive correlation based imaging

10:30 – 11:00 *coffee break*

11:00 – 12:00 **Panel discussion**

12:00 *lunch break*

16:00 – 16:30 **Lenya Ryzhik**

Kinetic models for waves in random media

16:45 – 17:15 **Simon Arridge**

Diffuse Optical and PhotoAcoustic Tomography

} Math.-Colloquium, these lectures
take place in the OMP1 lounge
(Oskar Morgenstern-Platz 1, 12th
floor)

- **Thursday, May 8, 2014**

09:30 – 10:30 **Simon Arridge**

Reconstruction in PhotoAcoustic Tomography, I

10:30 – 11:00 *coffee break*

11:00 – 12:00 **Simon Arridge**

Reconstruction in Quantitative PhotoAcoustic Tomography, II

12:00 *lunch break*

15:00 – 16:00 **Alexander Mamonov**

Krein-Gelfand-Levitan algorithm for inverse hyperbolic problems via spectrally matched finite-difference grids. Joint with V. Druskin and M. Zaslavsky.

16:00 – 17:00 **Maarten de Hoop**

Inverse problem of electroseismic conversion

- **Friday, May 9, 2014**

09:30 – 10:00 **Wolf Naetar**

Quantitative photoacoustic tomography with piecewise constant material parameters

10:00 – 10:30 *coffee break*

10:30 – 11:00 **Stefan Rotter**

Controlling waves in complex scattering systems

Most lectures take place in the ESI Boltzmann Lecture Hall