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The 15th Internal SFB Meeting

Universitätszentrum Obergurgl, Austria

November 27 – 30, 2023

Program

Monday, November 27

18:00 – 19:30 Dinner

19:30 – 20:30 **Evening Session**
Chairing: Otmar Scherzer

19:30 – 19:55 *Stability for the anisotropic Calderon problem*
Sonia Foschiatti

20:00 – 20:25 *Multi-scale corner detection*
Bochra Mejri

20:30 – 21:00 **Meeting of the Principal Investigators**

Tuesday, November 28

09:00 – 12:00 **Morning Session**
Chairing: Peter Elbau

09:00 – 09:25 *Recent progress in quantitative PAT–OCT–Elastography*
Lisa Krainz

09:30 – 09:55 *Update on quantitative PAT–OCT–Elastography*
Ekaterina Sherina

10:00 – 10:30 **Coffee Break**

10:30 – 10:55 *Reconstructing refractive indices from OCT for scattering layered media*
Leopold Veselka

- 11:00 – 11:25 *Scattering by a layered medium: Direct and inverse problems*
Leonidas Mindrinos
- 11:30 – 11:55 *Introduction to photoacoustic tomography*
Jaakko Kultima
- 12:00 – 17:00 **Lunch Break & Group Discussions**
- 17:00 – 18:00 **Afternoon Session**
Chairing: Wolfgang Drexler
- 17:00 – 17:25 *Inverse scattering problem with internal sources*
Yakun Dong
- 17:30 – 17:55 *Second harmonic imaging, initial conditions and sources for non-linear acoustics*
Nicolas Gindrier
- 18:00 – 19:30 **Dinner**
- 19:30 – 20:30 **Meeting of the SFB Members**

Wednesday, November 29

- 09:00 – 12:00 **Morning Session**
Chairing: Monika Ritsch-Marte
- 09:00 – 09:25 *Acoustic reorientation for multi-angle optical coherence tomography*
Mia Kvåle Løvmo
- 09:30 – 09:55 *Quantitative phase measurement for tomography*
Franziska Strasser
- 10:00 – 10:30 **Coffee Break**
- 10:30 – 10:55 *Universal filtered backpropagation formula for diffraction tomography with various imaging setups*
Michael Quellmalz
- 11:00 – 11:25 *Updates on uniqueness of angular velocity reconstruction*
Denise Schmutz
- 11:30 – 11:55 *Molecule movement and microcluster tracking*
Christian Wald
- 12:00 – 18:00 **Lunch Break & Group Discussions**
- 18:00 – 19:30 **Dinner**

Thursday, November 30

09:00 – 12:00

Morning Session

Chairing: Glenn van de Ven

09:00 – 09:25

On phase unwrapping and phase retrieval

Simon Hubmer

09:30 – 09:55

AO-OCT with the P-WFS: From proof of concept towards clinical application

Elisabeth Brunner

10:00 – 10:30

Coffee Break

10:30 – 10:55

Full datacube modeling in extragalactic archaeology

Fabian Hinterer

11:00 – 11:25

How can cosmological simulations inform the recovery of stellar orbit distributions of galaxies?

Stephanie Reiter

11:30 – 11:55

Update on modeling non-Gaussian velocity distributions

Prashin Jethwa

12:00 – 13:20

Lunch

13:20

Departure