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## The 16th Internal SFB Meeting

bifeb Strobl, Austria

July 01 – 05, 2024

### Program

#### Monday, July 01

11:30 – 12:30 Individual Arrival

12:30 – 14:00 **Opening Lunch**

14:00 – 18:00 **Afternoon Session**  
Chairing: Ronny Ramlau

14:00 – 14:25 *What is the status of AO retinal imaging with an extended field of view?*  
*Elisabeth Brunner*

14:30 – 14:55 *High fidelity simulations and control of contactless adaptive mirrors*  
*Bernadett Stadler*

15:00 – 15:30 **Coffee Break**

15:30 – 15:55 *Clinical applications of adaptive optics OCT*  
*Michael Pircher*

16:00 – 16:25 *System identification for adaptive mirror simulations*  
*Daniel Jodlbauer*

16:30 – 18:00 **Group Discussion: Adaptive Optics**  
Groups: **SP3** (Drexler) and **SP5** (Ramlau)

18:00 – 19:30 **Dinner**

#### Tuesday, July 02

09:00 – 12:00 **Morning Session**  
Chairing: Wolfgang Drexler

09:00 – 09:50 *Invited Talk I*  
*Markus Grasmair*

10:00 – 10:30 **Coffee Break**

10:30 – 10:55 *Different numerical approaches for the Magnetization Inverse Problem in 2D*  
*Cristobal Guillen*

11:00 – 12:00 *Group Discussion: **Quantitative Diagnostic Tissue Optics***  
*Groups: SP3 (Drexler) and SP4 (Elbau)*

12:30 – 14:00 **Lunch Break**

14:00 – 18:00 **Afternoon Session**  
Chairing: Monika Ritsch-Martel

14:00 – 14:50 *Invited Talk II*  
*Ivo Ihrke*

15:00 – 15:30 **Coffee Break**

15:30 – 15:55 *Update on PAT-OCT-Elastography*  
*Lisa Krainz*

16:00 – 16:25 *Quantitative PAT-OCT Elastography for the PW1 sample and update on the recent sub-project directions*  
*Ekaterina Sherina*

16:30 – 16:55 *Incorporating non-linear elasticity model into quantitative Optical Coherence Elastography*  
*Zheyi Yang*

17:00 – 18:00 *Group Discussion: **Quantitative PAT-OCT Elastography***  
*Groups: SP3 (Drexler) and SP7 (Scherzer)*

18:00 – 19:30 **Dinner**

19:30 – 20:30 **Meeting of the Principal Investigators**

## Wednesday, July 03

09:00 – 12:00 **Morning Session**  
Chairing: Otmar Scherzer

09:00 – 09:50 *Invited Talk III*  
*John Schotland*

10:00 – 10:30 **Coffee Break**

10:30 – 10:55 *Inverse scattering problem with internal sources*  
*Yakun Dong*

11:00 – 12:00 *Group Discussion: **Superresolution Microscopy***  
*Groups: SP5 (Ramlau), SP7 (Scherzer) and SP9 (Schütz)*

*in parallel*

**Group Discussion: Combined Acoustic Trapping and OCT**

Groups: **SP3** (Drexler), **SP4** (Elbau) and **SP6** (Ritsch-Marte)

12:30 – 14:00

**Lunch Break**

14:00 – 18:00

**Afternoon Session**

Chairing: Glenn van de Ven

14:00 – 14:25

*Detectability of galactic counter-rotation using PNKR*

*Prashin Jethwa*

14:30 – 14:55

*Progress in prior modeling for orbit distributions*

*Stefanie Reiter*

15:00 – 15:30

**Coffee Break**

15:30 – 15:55

*Stellar populations from integrated spectra in observations and simulations*

*Alina Boecker*

16:00 – 16:25

*Modern Approaches for PSF Reconstruction in Adaptive Optics*

*Roland Wagner*

16:30 – 18:00

**Group Discussion: Astrophysics**

Groups: **SP5** (Ramlau), **SP7** (Scherzer) and **SP11** (van de Ven)

18:00 – 19:30

**Dinner**

19:30 – 20:30

**Meeting of the SFB Members**

**Thursday, July 04**

09:00 – 12:00

**Morning Session**

Chairing: Peter Elbau

09:00 – 09:25

*Acoustic rotation for tomography*

*Mia Kvale Lovmo*

09:25 – 09:55

*Update on Diffraction Tomography*

*Michael Quellmalz*

10:00 – 10:30

**Coffee Break**

10:30 – 10:55

*How to destroy symmetry with a finite number of points*

*Denise Schmutz*

11:00 – 12:00

**Group Discussion: Diffraction and Trapped Particles**

Groups: **SP4** (Elbau), **SP6** (Ritsch-Marte), **SP7** (Scherzer), **SP10** (Steidl)

12:30 – 14:00

**Lunch Break**

14:00 – 18:00

**Afternoon Session**

Group excursion: Ronny Ramlau

14:00 – 17:00

*Excursion: Light Hiking with Sightseeing*

18:00 – 19:30

**Dinner**

## Friday, July 05

09:00 – 12:00

### **Morning Session**

Chairing: Ronny Ramlau

09:00 – 09:25

*Reconstruction of images from limited-angle computed tomography data*

*Veronica Raffetto*

09:30 – 09:55

*Invited Talk*

*TBA*

10:00 – 10:30

### **Coffee Break**

10:30 – 10:55

*Focusing Ultrasound Waves through known Layered Media*

*Simon Hackl*

11:00 – 11:25

*Practical insights into Stability for Inverse Problems*

*Sonia Foschiatti*

11:30 – 11:55

*Recent Results on Atmospheric Tomography*

*Simon Hubmer & Ronny Ramlau*

12:30 – 14:00

### **Closing Lunch**

14:00

Individual Departure

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