

# Program

## SFB Member Workshop +

bifeb, Strobl am Wolfgangsee

September 10-13, 2019

### Tuesday, September 10, 2019

18:00 – 19:30 Dinner

### Wednesday, September 11, 2019

08:00 – 09:00 Breakfast

09:00 – 09:10 **Welcome Session**

09:10 – 10:30 **Superresolution Microscopy**

**09:10 Gerhard Schütz, Ronny Ramlau, Otmar Scherzer**

*Single molecule-based superresolution microscopy*

**09:40 Montse Lopez**

*Cryogenic setup for superresolution microscopy*

**09:50 Magdalena Schneider**

*Simulation of oligomeric structures in cryo-SMLM*

**10:00 Fabian Hinterer**

*Localization precision in cryo superresolution microscopy*

**10:15 Roger Telschow**

*On the reconstruction of oligomeric structures*

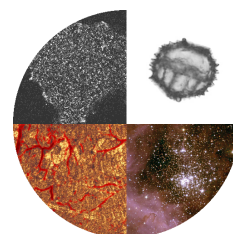
*in superresolution microscopy*

10:30 – 11:00 Coffee Break

11:00 – 12:15 **Trapped Particles**

**11:00 Mia Kvåle Løvmo, Benedikt Pressl**

*Forces in a cuboid ultrasonic resonator*



**11:30 Denise Schmutz**

*Motion reconstruction for optical tomography  
in comparison with cryo-EM*

**11:50 Peter Elbau**

*On the uniqueness of motion reconstructions from projection data*

**12:15 – 12:45 PI Meeting**

12:30 – 14:00 Lunch

**14:00 – 15:25 Quantitative Imaging**

**14:00 Peter Elbau**

*Reconstructions for photoacoustic and optical coherence tomography  
of layered media*

**14:15 Wolfgang Drexler**

*Ongoing work in OCT elastography*

**14:30 Lisa Krainz, Ekaterina Sherina**

*Recent progress and challenges in quantitative PAT-OCT elastography*

**15:00 Leopold Veselka**

*Recent progress in (combined PAT and) OCT*

15:25 – 16:00 Coffee Break

**16:00 – 17:30 Adaptive Optics**

**16:00 Elisabeth Brunner (representing Michael Pircher)**

*Adaptive optics in visual science*

**16:15 Elisabeth Brunner**

*Extending the field of view of adaptive optics OCT*

**16:35 Günter Auzinger**

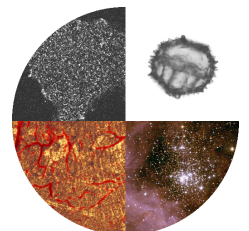
*CuReD: Challenges in adaption of an established AO reconstructor  
from astronomy to ophthalmology*

**17:00 Elisabeth Brunner, Iuliia Shatokhina**

*AO-OCT with a pyramid wavefront sensor*

**17:30 – 18:00 Group Discussions**

18:00 – 19:30 Dinner



## Thursday, September 12, 2019

- 08:00 – 09:00 Breakfast
- 09:00 – 10:30 **Contributed Talks I**
- 09:00 Introduction of Participants**
- 09:20 Gwenael Mercier**  
*A bit of denoising by total variation*
- 10:30 – 11:00 Coffee Break
- 11:00 – 12:30 **Contributed Talks II**
- 11:00 Alexander Ploier**  
*A curvature study of the medical calcar region*
- 11:20 Leonidas Mindrinos**  
*Quantitative refractive index reconstructions*
- 12:30 – 14:00 Lunch
- 14:00 – 18:00 **Excursion**
- 18:00 – 19:30 Dinner

## Friday, September 13, 2019

- 08:00 – 09:00 Breakfast
- 09:00 – 10:30 **Group Work I**
- 10:30 – 11:00 Coffee Break
- 11:00 – 12:30 **Group Work II**
- 12:30 – 13:30 Lunch

