

General Assembly

Max Planck Institute for Multidisciplinary Sciences (MPI-NAT)
22 - 24 October 2024

October 22

Venue: MPI-NAT City Campus, Hermann-Rein-Straße 3, 37075 Göttingen

11:00 Arrival and Registration

12:00 Lunch

13:00 Welcome

13:15 Artificial intelligence for microscopy - building image analysis foundation models
Prof. Constantin Pape

14:00 Flamingo: Tailored light sheet microscopy for live and cleared tissue imaging
Dr. Mostafa Aakhte

14:30 Evolved into a transporter: How the HIV capsid delivers a (viral) genome into the nucleus
Dr. Liran Fu

15:00 Coffee break

15:30 Deciphering the role of Ferlins in membrane docking and fusion using cryo-EM and cryo-ET
Dr. Julia Preobraschenski

16:00 Transient states and molecular pathways by cryo EM
Dr. Niels Fisher

16:30 Comprehensive characterization of tumor tissue by correlative multimodal 3D imaging
Prof. Frauke Alves

17:00 Tour: Imaging facilities City Campus

18:00 Why MINFLUX changes the localization game
Prof. Stefan Hell

19:30 Dinner at Amavi pure

20:15 Post-dinner discussions: Future development of MaxBI

22:00 End

October 23

Venue: MPI-NAT Fassberg Campus, Am Fassberg 11, 37077 Göttingen

- 9:00 Labeling biomolecules for live-cell nanoscopy: molecular mechanisms behind beautiful pictures
Dr. Ruta Gerasimaite
- 9:30 Visualizing the oocyte cytoplasm to understand maternal protein inheritance
Dr. Ida Jentoft
- 10:00 Break & transfer to Zeiss**
- 10:30 Tours: Imaging Facilities Fassberg Campus / Zeiss objective manufacture
- 12:00 Lunch**
- 13:00 Unlocking Bioscience Breakthroughs: Where HPC and AI Converge
Prof. Julian Kunkel
- 13:45 Coffee break**

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- 14:30 Welcome note by spokesperson Wiebke Möbius
- 14:45 Reports of the workgroups and discussion
- 16:00 "Career paths" survey status
- 16:30 Elections
- 17:30 End of the meeting

October 24: Satellite Workshop at Abberior

Venue: Abberior, Hans-Adolf-Krebs-Weg 6, 37077 Göttingen

- Morning session: Discussion about super-resolution applications in the facility context (limitations, accessibility, protocols)
- Afternoon session: Hands-on sessions using different imaging modalities (STED large tissue imaging, STED multi-color imaging, and MINFLUX).