

Complex Media NeuroPhotonics workshop

23.-27.10.2022 ---- Brno, Czechia

Sunday 23rd October

Arrival, check-in, registration

Monday 24th October

9:00 Morning session

1. **Welcome note** | Tomas Cizmar

2. **Sebastien Popoff** | CNRS- Institut Langevin, Paris | France | 30 min
Harnessing disorder and symmetries in multimode fibers

3. **Une Butaite** | University of Exeter | UK | 30 min
New ways to look through multimode optical fibres

10:30 COFFEE BREAK

11:00 1. **Rainer Heintzmann** | Leibniz- IPHT Jena | Germany | 30 min

Superresolution Imaging and Recovering Lost Information

2. **Ivo T. Leite** | EMBL Heidelberg | Germany | 30 min

Tbc

12:00 LUNCH

14:00 Afternoon session I.

1. **Pau Gorostiza** | ICREA, IBEC, BIST, CIBER | Spain | 30 min

Control of endogenous receptor activity using photoswitchable ligands and two-photon excitation

2. **Ondřej Novák** | Charles University Prague | Czechia | 30 min

tbc

3. **Laurent Bourdieu** | IBENS- ENS | France | 30 min

Wavefront shaping using acousto-optic deflectors allows fast 3D recording of neuronal activity and transcranial imaging

15:30 COFFEE BREAK, POSTERS

16:00 Afternoon session II.

1. **Sanja Bauer Mikulovic** | LIN Magdeburg | Germany | 30 min

tbc

2. **Anna Karpova** | LIN Magdeburg | Germany | 30 min

tbc

3. **Hongbo Jia** | LIN Magdeburg | Germany | 30 min

Identifying unique cells in the living brain by combination of two-photon imaging and single-cell electrophysiology

18:00 DINNER

Tuesday 25th October

9:00 Morning session

1. **Allard Mosk** | University of Twente | Netherlands | 30 min
Shaping light with information – Shaping information with light
2. **Hilton Barbosa de Aguiar** | CNRS- Laboratoire Kastler Brossel | France | 30 min
tbc

10:00 COFFEE BREAK

- 10:30 1. **Stefan Rotter** | TU Vienna | Austria | 30 min
Coherent perfect absorption and transmission of arbitrary wavefronts
2. **Shuzo Sakata** | University of Strathclyde Glasgow | UK | 30 min
Fiber photometry-based investigation of brain function and dysfunction
3. **Anna Devor** | Boston University | USA | 30 min
Imaging neurovascular interactions

12:00 LUNCH

14:00 Afternoon session I.

1. **Martin Thunemann** | Boston University | USA | 30 min
Neurophotonics and transparent microelectrode arrays to study brain physiologys
2. **Alessio Attardo** | LIN Magdeburg | Germany | 30 min
Dynamics of hippocampal structural plasticity, activity and learning
3. **Nicolò Accanto** | Institut de la Vision, Paris | France | 30 min
tbc

15:30 COFFEE BREAK, POSTERS

16:00 Afternoon session II.

1. **Tomas Cizmar** | ISI Brno/ Leibniz-IPHT Jena | 30 min
tbc
2. **Complex Photonics Group ISI Brno slot** | ISI Brno | Czechia | 30 min
tbc
3. **Holographic Endoscopy Group IPHT Jena slot** | Leibniz- IPHT Jena | Germany | 30 min
tbc

18:00 DINNER & SOCIAL EVENT * BOWLING*

Wednesday 26th October

9:00 Morning session

1. **Ori Katz** | The Hebrew University of Jerusalem | Israel | 30 min
Real-time lensless holography through flexible fiber bundles
2. **Jürgen Czarske** | TU Dresden | German | 30 min
Lensless Multicore Fiber Endoscopy towards NeuroPhotonics
3. **Keith Mathieson** | University of Strathclyde Glasgow | UK | 30 min
tbc

10:30 COFFEE BREAK

- 11:00 1. **Eric Klein** | IMTEK Freiburg | Germany | 30 min
tbc
2. **Massimo de Vittorio** | IIT Lecce | Italy | 30 min
tbc

12:00 LUNCH

14:00 Afternoon session I.

1. **Ferruccio Pisanello** | IIT Lecce | Italy | 30 min
Neurophotonics with tapered optical fibers: from depth-resolved fiber photometry to implantable nanoplasmonics
2. **Filippo Pisano** | IIT Lecce | Italy | 30 min
Exploring augmented neural implants: integrating optical nanomodulators and volumetric Raman spectroscopy with tapered fibers
3. **Andrea Satin** | IIT Genoa | Italy | 30 min
tbc

15:30 COFFEE BREAK, POSTERS

16:00 Afternoon session II.

1. **Shy Shoham** | Neuroscience Institute, NYU Grossman School of Medicine; Tech4Health Institute | USA | 30 min
tbc
3. **Julia Henschke and Evelyn Dylida** | DZNE Magdeburg | Germany | 30 min
2. **Tom Flossmann** | Centre for Discovery Brain Sciences Edinburgh | UK | 30 min
tbc
- 17:30 4. **Closing remarks** | Tomas Cizmar

18:00 DINNER



PHOTONICS PUBLIC PRIVATE PARTNERSHIP

Thursday 27th October

Scientific discussions, departure
