

Program

11th Workshop and Conference on Advanced Multiphoton and Fluorescence Lifetime Imaging Techniques FLIM 2017

Max-Born-Saal, Max-Born-Strasse 2A, 12489 Berlin-Adlershof

June 30 - July 1, 2017

| Friday, June 30 | | |
|----------------------------|--|------------------------|
| 08:00 - 09:00 | Registration | |
| 09:00 - 09:15 | <i>Opening remarks</i> | K. König, W. Becker |
| 09:15 - 09:45 | <i>Overview: State-of-the-art multiphoton tomography</i> | K. König |
| 09:45 - 10:15 | <i>Fluorescence lifetime imaging by multi-dimensional TCSPC - Advanced techniques and applications</i> | W. Becker |
| 10:15 - 10:30 | Coffee break | |
| Advanced Microscopy | | |
| 10:30 - 10:55 | <i>Wide-field TCSPC FLIM with picosecond time resolution</i> | K. Suhling |
| 10:55 - 11:20 | <i>Biological computing using FLIM measurements</i> | D. Fixler |
| 11:20 - 11:45 | <i>High-resolution multiplexed imaging of oxygen in 3D tissue models</i> | D. Papkovsky |
| 11:45 - 12:10 | <i>Fast FLIM at an image rate of 5 fps</i> | H. Studier |
| 12:10 - 12:35 | <i>Investigation of cell metabolism and oxygen sensing by FLIM and PLIM and biomedical applications</i> | A. Rück |
| 12:35 - 13:00 | <i>Quantitative single cell image analysis of endogenous molecules in cells and tissue: FLIM-FRET microscopy</i> | A. Periasamy |
| 13:00 - 14:00 | Lunch | |
| Tissue imaging | | |
| 14:00 - 14:25 | <i>Multiphoton tomography and Raman Spectroscopy of human skin</i> | J. Lademann |
| 14:25 - 14:50 | <i>In vivo skin aging calculation</i> | G. Breunig |
| 14:50 - 15:15 | <i>Measurements of absolute concentration of NADH using the phasor method</i> | E. Gratton |
| 15:15 - 15:40 | <i>Temporal focusing microscopy</i> | P. So |
| 15:40 - 16:05 | <i>Multiphoton pharmacokinetics</i> | M. Roberts |
| 16:05 - 16:30 | <i>Intravital imaging of airway by multiphoton and microscopic optical coherence tomography</i> | G. Hüttmann |
| 16:30 - 18:00 | Beer, Pretzels & e-Posters (3 min pitch + 3 min discussion) | |
| 18:00 - 21:00 | Excursion to the historical Supersonic Wind Tunnel on Campus Adlershof and Dinner | |

Saturday, July 1

| Biomedical applications I | | |
|-----------------------------------|---|--|
| 9:00 - 9:25 | <i>Advances in clinical skin imaging using multiphoton tomography</i> | M. Balu |
| 9:25 - 9:50 | <i>In vivo CARS imaging</i> | M. Weinigel |
| 9:50 - 10:15 | <i>Multiphoton fluorescence lifetime imaging at patient's bedside – from morphology to clinical pathophysiology</i> | V. Huck |
| 10:15 - 10:40 | <i>Multiphoton imaging of wounds</i> | M. Kaatz |
| 10:40 - 11:05 | <i>Metabolic state and microviscosity of cancer cells as indicators of response to chemotherapy</i> | M. Shirmanova |
| 11:05 - 11:30 | <i>Micro-surfaces for live cell and algae observations</i> | A. Chorvatova |
| 11:30 - 12:30 | Lunch | |
| Biomedical applications II | | |
| 12:30 - 12:55 | <i>Retinal autofluorescence for ophthalmic diagnostic – what can we learn from in vivo and in vitro FLIM?</i> | M. Hammer |
| 12:55 - 13:20 | <i>Clinical FLIO</i> | Y. Miura |
| 13:20 - 13:45 | <i>FLIM of cross-linked corneas</i> | A. Batista |
| 13:45 - 14:10 | <i>In vivo three-photon activity imaging in mouse brain</i> | T. Wang |
| 14:10 - 14:35 | <i>In vivo metabolic imaging of mouse tumor models</i> | M. Lukina |
| 14:35 - 15:00 | <i>Femtosecond laser flow cytometry</i> | A. Uchugonova |
| 15:00 - 18:00 | Hands-on workshop and closing remarks with Cremant Workstation I: Two-photon microscope with ultracompact laser MPM Workstation II: DCS-120 confocal scanning FLIM system Workstation III: Multiphoton tomograph MPTflex Workstation IV: Multiphoton tomograph with CARS module MPTflex-CARS | JenLab GmbH Becker & Hickl GmbH |