

ICBP 2022 – Preliminary Program

Thursday – 2nd of June

08 :00 Registration / Poster Installation

08:30 Conference opening:
Csilla Gergely, Jürgen Popp, Hervé Rigneault

PHOTONICS FOR IMAGING 1

Raman, Multiphoton, Fluorescence, Photoacoustic, Brillouin

Chair: **Csilla Gergely**

09:00 **Biomedical Photonics - From Bench to Bedside**
Jürgen Popp | Leibniz IPHT Jena, Germany

09:30 **Multidimensional and super-resolved fluorescence imaging and high content analysis**
Paul French | Imperial College London, United Kingdom

10:00 **Label free nonlinear microscopy and endoscopy**
Hervé Rigneault | Institut Fresnel, Marseille, France

10:30 – 11:00 **Selected oral communications**

Coffee break

Chair: **Jürgen Popp**

11:30 **Probing tissue biomechanics with novel Brillouin scattering spectroscopy**
Francesca Palombo | University of Exeter, United Kingdom

12:00 **Photoacoustic Imaging – Fundamentals to Clinical Applications**
James Joseph | University of Dundee, United Kingdom

12:30 – 13:00 **Selected oral communications**

13:00 – 14:30 **Lunch break**

PHOTONICS FOR IMAGING 2

Light-sheet, Phase, Multiphoton

Chair: **Paul French**

14:30 **New directions for wide field imaging**
Kishan Dholakia | University of St Andrews, United Kingdom

15:00 **Quantitative phase microscopy by wavefront sensing**
Serge Monneret | Institute Fresnel, Marseille, France

15:30 – 16:00 **Selected oral communications**

16:00 – 17:00 **Poster session 1.** | Coffee, Wine & Cheese

Chair: **Kishan Dholakia**

17:00 **3D imaging at different scales using single-objective Selective Plane Illumination Microscopy (SPIM)**
Jean-Baptiste Sibarita | IINS, Université de Bordeaux, France

17:30 **Fast multiphoton microscopy using light-sheet illumination**
Willy Supatto | Ecole Polytechnique, Université Paris Saclay, France

18:00 – 18:30 **Selected oral communications**

18:30 **Industrial section**

Friday – 3rd June

PHOTONICS FOR DIAGNOSTICS AND THERAPY 1

Chair: **Ronald Sroka**

08:30 **Cardiovascular monitoring devices enabled by silicon photonics**
Roel Baets | Ghent University, Belgium

09:00 **A fluorescence-based POCT device for immunosuppressant-drug monitoring in transplanted patients**
Ambra Giannetti | IFAC CNR, Sesto Fiorentino, Italy

09:30 **Differential label-free optofluidic sensor based on polymeric microresonators for biochemical sensing**
Isabelle Ledoux-Rak | LPQM, CNRS ENS Paris-Saclay, Cachan, France

10:00 – 10:45 **Selected oral communications**

Coffee break

Chair: **Turgut Durduran**

11:15 **Innovative Spectroscopy Devices for Rapid Point-of-Care Diagnostics**
Ronald Sroka | University Hospital München, Germany

11:45 **Nanodiamond orientation sensing for applications in soft matters**
Quan Li | The Chinese University of Hong Kong

12:15 – 13:00 **Selected oral communications**

13:00 – 14 :30 **Lunch break**

NEUROPHOTONICS

Chair: **Balázs Rózsa**

14:30 **Morpho functional imaging of the brain**
Francesco S. Pavone | LENS - Univ Florence, Sesto Fiorentino, Italy

15:00 **3D optical imaging of tissue dynamics: From Label-free characterization of biopsies towards functional imaging of neural tissues**
Olivier Thouvenin | Institute Langevin - ESPCI Paris, France

15:30 **Fast imaging of neuronal activity in freely-behaving mice using a confocal fiberscope**
Cathie Ventalon | IBENS, ENS CNRS, Paris, France

16:00 – 16:30 **Selected oral communications**

16:30 – 17:30 **Poster session 2.** | Coffee, Wine & Cheese

Chair: **Olivier Thouvenin**

17:30 **Visual restoration by 3D imaging and 3D photostimulation in large volumes in vivo**
Balázs Rózsa | IEM, HAS, Budapest, Hungary

18:00 **Cerebral blood flow dynamics as a biomarker of brain injury in ischemic stroke**
Turgut Durduran | ICFO Barcelona, Spain

20 :00 **Gala dinner**

Saturday – 4th of June

PHOTONICS FOR IMAGING 3

Raman, Super resolution

Chair: **Hervé Rigneault**

09:00 **Developing a sensitive and rapid user-friendly BCARS microscope**
Xavier Audier | Georgia Institute of Technology, Atlanta, USA

09:30 **Towards Quantitative BioImaging with Self-Referencing Broadband Coherent Anti-Stokes Raman Scattering**
Charles Camp | NIST, Gaithersburg, USA

10:00 – 10:45 **Selected oral communications**

Coffee break

Chair: **Cathie Ventalon**

11:30 **Lipid segregation during HIV-1 assembly using live cell super resolution nanoscopy**
Delphine Muriaux | IRIM, CNRS, Université de Montpellier, France

12:00 **Looking at GPCR structure, dynamics and interactions with single molecule fluorescence**
Emmanuel Margeat | CBS, Montpellier, France

12:30 – 13:00 **Selected oral communications**

13:00 – 14:30 **Lunch break**

PHOTONICS FOR DIAGNOSTICS AND THERAPY 2

Chair: **Isabelle Ledoux-Rak**

14:30 **Multidirectional spectroscopic detection of inflamed and cancer cells in tissues**
Kamilla Malek | Jagellonian University, Kraków, Poland

15:00 **Reconfigurable optical and acoustic traps for the contact-free manipulation of cell clusters**
Monika Ritsch-Marte | Medical University of Innsbruck, Austria

15:30 – 16:30 **Selected oral communications**

16:30 – 17:00 **Coffee, Wine & Cheese**

17:00 **Round table | General Assembly**

18:00 **Closing Ceremony – Poster prizes**

20:00 **Montpellier by night**
Guided tour in the historical center of Montpellier