

SUPERRESOLUTION TECHNIQUES:
FROM METHODS TO DATA ANALYSIS

L4H
2013
29 May



light for
health



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29 May, 2013



- 08.00 – 09.30 Registration**
- 09.30 – 09.45 Welcome**
- 09.45 – 10.25 Nanoscopy with focused light**
Stefan Hell
Max Planck Institute for Biophysical Chemistry, Department of NanoBiophotonics, Germany
- 10.25 – 11.05 Actin Mediates the Nanoscale Membrane Organization of the Clustered Membrane Protein Influenza Hemagglutinin**
Samuel Hess
University of Maine, Institute for Molecular Biophysics, Department of Physics and Astronomy, USA
- 11.05 – 11.25 Image resolution in localization microscopy**
Bernd Rieger
Delft University of Technology, Faculty of Applied Sciences, Department of Imaging Science & Technology, The Netherlands
- 11.25 – 11.55 Coffee Break**
- 11.55 – 12.35 Bioimaging at the nanoscale: Single-molecule and super-resolution fluorescence microscopy**
Xiaowei Zhuang
Harvard University, Howard Hughes Medical Institute, Department of Chemistry and Chemical Biology, Department of Physics, USA
- 12.35 – 12.55 Imaging biological processes with quantitative high spatiotemporal resolution microscopy**
Melike Lakadamyali
The Institute of Photonic Sciences (ICFO), Advanced Fluorescence Imaging and Biophysics Group, Spain
- 12.55 – 14.00 Lunch**
- 14.00 – 16.30 Poster Session & Lab Visits**
- 16.30 – 17.10 Constructing 3D-NANOMAPS of Synaptic Proteins by Localization Microscopy**
Markus Sauer
Julius Maximilian University Würzburg, Biotechnology & Biophysics, Germany
- 17.10 – 17.30 Imaging T-cell signal transduction by integrative and correlative nanoscopy**
Thierry Rose
Institut Pasteur, Département Infection et Epidémiologie, Département d'Immunologie, Unité d'Immunogénétique Cellulaire, France
- 17.30 – 18.10 High-Speed Hyperspectral Nanoscopy for Studying Dynamic Protein Interactions**
Keith Lidke
University of New Mexico, Department of Physics & Astronomy, USA
- 18.10 – 18.30 PSF decomposition of nanoscopy images via Bayesian analysis unravels distinct molecular organization of the cell**
Carlo Manzo
The Institute of Photonic Sciences (ICFO), Single Molecule Biophotonics Group, Spain