SUPERRESOLUTION TECHNIQUES 2018

From Labeling to Images

27-29 May 2018 - Lund, Sweden

Sunday, 27 May 2018 *Location: Dept of Physics, Building Q, Sölvegatan 16, Lund* *http://www.ftf.lth.se/contact/*

TIME	ROOM	SPEAKER	TITLE
14:00	k-space	Pre-workshop tutorial: Ass. Prof. Ilaria Testa, KTH, Stockholm	"RESOLFT and reversible switchable fluorescent proteins"
15:00	k-space	Pre-workshop tutorial: Prof. Jerker Widengren, KTH, Stockholm	"Fluorescence-based superresolution imaging - photophysical considerations and some aspects regarding co-localization analyses"
16:00	k-space	Pre-workshop tutorial: Dr. Daniel Jans, KTH, Stockholm	"Super-resolution microscopy support at SciLifeLab Stockholm"
17:00	STED / Microfluidics	Lab Tour: Dr. Jason Beech and Dr. Elke Hebisch	STED microscopy lab and microfluidics lab
18:00	k-space	***INFORMAL WELCOME RECEPTION***	
19:00		**Adjourn**	

Monday, 28 May 2018 *Location: AF-borgen, Sandgatan 2, Lund* *http://afborgen.se/*

TIME	CHAIR	ROOM	SPEAKER	TITLE
08:00		Nya Fest	Exhibitors have acces to the location	
09:00		Upper hallway	***REGISTRATION***	
09:45	Prof Jonas Tegenfeldt	Lilla Salen	**Welcome**	
10:00	Dr. Elke Hebisch	Lilla Salen	Ass. Prof. Ilaria Testa, KTH, Stockholm	"MoNaLISA: a gentle nanoscope for 3D-4D imaging of living cells"
10:45		Lilla Salen	Andreas Bodén, KTH, Stockholm	"MoNaLISA RESOLFT imaging"
11:00		Lilla Salen	Prof. Peter Dedecker, KU Leuven, Leuven	"Visualizing biosensors with high spatial resolution"
11:45		Lilla Salen	Emil Marklund, Uppsala University, Uppsala	"Direct observation of rotation-coupled protein diffusion along DNA on the microsecond timescale"
12:05		Nya Fest	***Boxed LUNCH***	
13:15	Dr. Jason Beech	Lilla Salen	Exhibitor: Oliver Garner, Bergman Labora & Nikon	"Focusing on Superresolution"
13:30		Lilla Salen	Exhibitor: Maria Loidolt-Krüger & Mathias Bayer, PicoQuant	"It`s about time, Add another dimension to your data with time-resolved single photon detection"
13:45		Lilla Salen	Exhibitor: Sebastian Peter, Olympus Europa	"IXplore SpinSR: Confocal superresolution for live-cell samples"
14:00		Lilla Salen	Prof. Jerker Widengren, KTH, Stockholm	"STED imaging of spatial organization of proteins in cells - a possible basis for cancer diagnostics and to understand fundamental cellular disease mechanisms"
14:45		Nya Fest	***COFFEE - Posters and Exhibit***	
15:15	Prof. Jerker Widengren	Lilla Salen	Prof. Suliana Manley, EPFL, Lausanne	"High throughput localization microscopy for structural determination"
16:00		Lilla Salen	Exhibitor: Jürgen Schmied, GattaQuant	"The next generation of imaging standards for fluorescence microscopy"
16:15		Lilla Salen	Exhibitor: Hans Thorn and Maria Trulsson, Zeiss	"FAST Airyscan imaging"
16:30		Lilla Salen	Exhibitor: Sven Sidentstein, Abberior	TBD
17:00		Nya Fest	***BEER & SNACKS - Posters and Exhibit***	
19:00		Tegners Matsalar	***DINNER***	

Tuesday, 29 May 2018 *Location: AF-borgen, Sandgatan 2, Lund* *http://afborgen.se/*

TIME	CHAIR	ROOM	SPEAKER	TITLE
09:00	Prof. Johan Elf	Lilla Salen	Prof. Erwin Peterman, VU Amsterdam, Amsterdam	"Super-resolution single-molecule studies in vitro and in vivo"
09:45		Lilla Salen	Prof. Ivan Scheblykin, Lund University, Lund	"Resolving individual non-radiative recombination channels in perovskite semiconductors beyond ensemble averaging"
10:15		Nya Fest	***COFFEE - Posters and Exhibit***	
10:45	Ass. Prof. Ilaria Testa	Lilla Salen	Dr. Balzarotti, MPI for Biophysical Chemistry, Göttingen	"Maximally informative photons in optical nanoscopy: pushing the spatio-temporal resolution in imaging and tracking"
11:30		Lilla Salen	Dr. Daniel Jans, KTH, Stockholm	"Super-Resolution Microscopy of Mitochondrial Protein Complexes"
12:15		Tegners Matsalar Nya Fest	***LUNCH*** ***Dessert in the poster & exhibit lounge***	
13:45	Assoc. Prof. Peter Jönsson	Lilla Salen	Prof. Edward Lemke, EMBL, Heidelberg	"Tools to Decode Molecular Plasticity in the Dark Proteome"
14:30		Lilla Salen	Prof. Johan Elf, Uppsla University, Uppsala	“A genome-wide approach to intracellular biophysics”
15:00		Nya Fest	***COFFEE - Posters and Exhibit***	
15:30	Dr. Elke Hebisch	Lilla Salen	Jonatan Alvelid, KTH, Stockholm	"STED on red shifted Q dots"
15:45		Lilla Salen	Prof. Ralf Jungman, MPI of Biochemistry, Martinsried	"Super-resolution Microscopy with DNA Molecules - Basics and Applications"
16:30	Prof. Jonas Tegenfeldt	Lilla Salen	Concluding remarks and poster prize ceremony	
16:45 19:00			**Adjourn** All posters down and all equipment packed up	

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TITLE	AUTHOURS	AFFILIATION
Single-Vesicle Detection to Study Protein-Lipid Interactions	Andersson, Alexandra	Physical Chemistry, Lund University, Sweden
Open-source python software in super-resolution fluorescence microscopy: from instrument control to quantitative data analysis	Barabas, Federico M.	CIBIO, CONICET, Argentina; Departamento de Física, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina; Department of Applied Physics and Science for Life Laboratory, KTH, Sweden
Drift correction in depth for STORM imaging	Barooji, Younes F.	Stemphys, Niels Bohr Institute, University of Copenhagen, Denmark
Fluorescence Nanoscopy Mapping of Protein Storage and Distribution in Platelets Following Activation by Tumor Cells	Bergstrand, Jan	KTH, Stockholm, Sweden
Tunable nano-channels from guided fracture for biopolymer imaging	Chiu, Han-Ching	Biomedical Engineering, Georgia Institute of Technology, Atlanta, GA, United States
Combined STED nanoscopy and enzymatic labeling to study the fine organization and dynamics of neuronal organelles across distinct neuronal compartment	Coceano, Giovanna	Advanced Optical Bio-Imaging Laboratory, Science for Life Laboratory, KTH, Karolinska Institutet Science, Sweden
SMART RESOLFT nanoscopy to lower photo dosage and acquisition time	Dreier, Jes	Scilife Lab – KTH Royal Institute of Technology, Stockholm, Sweden
Super-resolution luminescence microspectroscopy of individual metal-halide perovskite nanowires: local variation of crystal phase transition temperature	Dobrovolsky, Alexander	Chemical Physics and NanoLund, Lund University
STED nanoscopy of live cell-nanostraw interactions	Hebisch, Elke	Solid State Physics, Lund University, Sweden
Multi-Species Diffusion Studies in Membranes Utilizing Scanning FCS and Super-Resolution Microscopy	Koberling, Felix	PicoQuant GmbH, Germany; Biology/Molecular Biophysics, Humboldt-Universität zu Berlin, Germany
Site localisation on bacterial surface proteins using super-resolution imaging	Kumra, Vibha	Division of Solid State Physics, Lund University, Sweden; Division of Infection Medicine at BMC, Lund University, Sweden
Quantitative Ultrafast FLIM: rapidFLIM	Loidolt-Krüger, Maria	PicoQuant, Germany
Nanobio Interactions: The Myeloperoxidase Enzyme and Gallium Arsenide Nanowires	Mellace, Cesare	Division of Biochemistry and Structural Biology, Lund University, Sweden; NanoLund, Lund University, Sweden
Thermoresponsive colloidal molecules prepared using droplet-based microfluidics	Peng, Feifei	Lund University, Sweden
Superresolution Imaging of DNA	Ström, Oskar	Division of Solid State Physics, Lund University, Sweden; NanoLund, Lund University, Sweden
Generation of a novel cell based HCS assay for assessment of the dynamic process of α-synuclein aggregation	Svanbergsson, A.	Department of Experimental Medicinal Science of Lund University, Sweden