Program: **MAF Satellite Meeting on FRET**

Place: Chalmers campus. weblink.

INVITED: 30 min + 8 min; CONTRIBUTED: 15 min + 4 min

Session 1 *Chair:* Don Lamb *(LMU München)* **Dynamics in burst analysis** **14/09/2022** **4:00 -7:30 PM**	**4:00 – 4:40: Benjamin Schuler (Universität Zürich) – INVITED** *Nanosecond FCS: Probing sub-microsecond biomolecular dynamics* **4:40 – 5:00: Nicola Galvanetto (Universität Zürich)** *Observing chain dynamics in a biomolecular condensate* **5:00 – 5:20: Paul David Harris (Hebrew University of Jerusalem)** *Multi-Parameter photon by photon hidden Markov modeling* ***5:20 – 5:40: Coffee/Tea Break*** **5:40 – 6:20: Jelle Hendrix (Hasselt University) - INVITED** *Extracting dynamics from bursts - a walkthrough* **6:20 – 6:40: Stefan Wennmalm (KTH Stockholm)** *FRET-FCS detects small fractions of NKA oligomers in living cells* **6:40 – 7:00: Quan Wang (National Institutes of Health, Bethesda)** *ABEL-FRET enables tether-free and high-resolution single-molecule FRET in solution* **7:00 – 7:30: Eric A. Drier (Mad City Labs) - SPONSOR** *A Versatile Microscope for smFRET*
Dinner	**8:00 - ??:?? Meeting Dinner**
Session 2 *Chair:* Sonja Schmid *(Wageningen University)* **Time trace dynamics** **15/09/2022** **9:00 -12:00 AM**	**9:00 – 9:40: Nikos Hatzakis (University of Copenhagen) - INVITED** *Accelerating protein structure dynamics to function correlation by Single molecule studies and machine learning analysis* **9:40 – 10:00: Carlos de Lannoy (Delft University of Technology)** *FRETboard: train any model on any computer for single-molecule FRET analysis* **10:00 – 10:20: Simon Wanninger (Ludwig-Maximilians-Universität München)** *Deep Learning assisted, single molecule imaging analysis of multi-color DNA Origami structures* ***10:20 – 10:40: Coffee/Tea Break*** **10:40 – 11:20: Victoria Birkedal (Aarhus University) - INVITED** *Single molecule FRET analysis of DNA folding dynamics* **11:20 – 11:40: Lennart Grabenhorst (Ludwig-Maximilians-Universität München)** *Single-molecule FRET experiments at MHz count rates with DNA origami nanoantennas* **11:40 – 12:00: Ivo Severins (Delft University of Technology)** *Single-molecule biophysics in sequence space using Illumina sequencing chips*
Lunch Break	**12:00 – 1:30: A break for lunch (you are on your own)**
Session 3 *Chair:* Niko Hildebrandt *(Seoul National University)* **FRET in DNA nanotechnology and biosensing** **15/09/2022** **1:30 - 4:30 PM**	**1:30 – 2:10: Marcus Wilhelmsson (Chalmers University) - INVITED** *Interbase FRET for nucleic acid investigations* **2:10 – 2:30: Andreas Schmidbauer (Universität Regensburg)** *Integration of fluorescently labeled subunits into human RNA polymerase I for single-molecule FRET studies* **2:30 – 2:50: Ruifang Su (Université de Rouen Normandie)** *DNA hybridization-modulated terbium-to-quantum dot FRET barcoding for temporal multiplexing and imaging* ***2:50 – 3:10: Coffee/Tea Break*** **3:10 – 3:50: Ilko Bald (Universität Potsdam) - INVITED** *DNA origami structures as scaffolds for FRET based sensing* **3:50 – 4:10: Viktorija Glembockyte (Ludwig-Maximilians-Universität München)** *DNA origami tools for single-molecule sensing* **4:10 – 4:30: Abhinaya Anandamurugan (Universität Freiburg)** *Towards in vivo single molecule fluorescence multiplexed immunoassays*