



SFB1032 Annual Workshop 2021

Friday, October 15

Haus der bayerischen Landwirtschaft Herrsching

Rieder Str. 70, 82211 Herrsching am Ammersee

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09:50	Joachim Rädler	Welcome
Area A: Spatio-temporal control in nanoscale reaction networks		
10:00	A02 – Simmel group Matthias Vogt	Storage and release of mechanical energy using a DNA nanorobotic mechanism
10:15	A03 – Gerland group Stephan Kremser	Local interactions can create robust and tunable patterns
10:30	A04 – Braun group Dieter Braun	tRNA sequences can assemble into a replicator
10:45	A06 – Heuer-Jungemann group Amelie Heuer-Jungemann	DNA origami nanoagents show anti-tumoral activity in multicellular tumor spheroids
11:00	<i>Coffee Break</i>	
11:30	A06 – Liedl group Joe Tavacoli	Self-Assembled Magnetic Modular Microswimmers
11:45	A07 – Nickel group Bert Nickel	Photoswitchable lipids membranes, silica-coated DNA origami and DNA lattices studied by x-rays
12:00	A08 – Lohmüller group Francis Schuknecht	Nanoagents for single protein spectroscopy and photoswitching with red light
12:15	A09 – Schwille group Tamara Heermann	Mass-sensitive particle tracking to elucidate the membrane-associated MinDE reaction cycle
12:30	<i>Lunch</i>	
13:30	A10 – Bausch group Franz Hutterer	Mechanical plasticity of collagen directs branch elongation in human mammary gland organoids
13:45	A11 – Jungmann group Susanne Reinhardt	In situ identification of protein complexes in focal adhesions with molecular resolution
14:00	A12 – Schneider group Corinna Kersten	RNA aptamers as sensors for the miR200-family of micro RNAs
14:15	A13 – Tinnefeld group Sarah Ochmann	Sensors for membrane voltage by DNA nanotech
14:30	<i>Coffee Break</i>	
Area B: Nanosystems controlling cellular dynamics		
15:00	B01 – Rädler group J. Heyn & S. Stöberl	Cell migration dynamics in confined environments
15:15	B01 – Veigel group Markus Kröss	The role of myosin VI and its regulation in cell migration
15:30	B02 – Frey group Tom Burkart	Pattern formation without energy consumption
15:45	B03 – Lamb group Evelyn Ploetz	Correlative characterization of nanoagents
16:00	B04 – Wagner group Andreas Roidl	Nucleic acid nanoagents utilizing the intracellular microRNA machinery for switching functions in cells
16:15	<i>Coffee Break</i>	
16:45	B08 – Zahler group Christina Jayachandran	Influence of forces in Angiogenesis in 3D model systems
17:00	B09 – Thorn-Seshold Benedikt Winkler	Improving chemical photoswitches for biophysics & biology
17:15	B11 – Engelke group Hanna Engelke	Nanoagents moving south east
17:30	B12 – Broedersz group Tom Brandstätter	Curvature-induced velocity waves in rotating multicellular spheroids