

MONDAY, SEPTEMBER 26TH, 2022

Plenary Session 2 – DPG Session		Audimax
08:30–10:30	Chair: Andreas Zumbusch, Konstanz, GER	
08:30–09:00	T 4 Sarah Köster , Göttingen, GER <i>Intermediate filaments in the cytoskeleton: safety belt and shock absorber for the cell?</i>	
09:00–09:30	T 5 Jan Philipp Junker , Berlin, GER <i>Simultaneous lineage tracing and cell type identification using CRISPR/Cas9 induced genetic scars</i>	
09:30–10:00	T 6 Madhavi Krishnan , Oxford, UK <i>Bringing electrostatics to light: electrometry probes a new dimension at the molecular scale</i>	
10:00–10:30	T 7 Joachim Rädler , München, GER <i>Mechanisms of LNP-based RNA delivery and models of time-resolved gene expression in single cells</i>	
10:30–11:00	Coffee Break	
Parallel Session 1A – Membrane Biophysics I		A 701
11:00–12:00	Chair: Andreas Janshoff, Göttingen, GER	
11:00–11:15	T 8 Katia Cosentino , Osnabrück, GER <i>Membrane permeabilization in regulated cell death at the single molecule level</i>	
11:15–11:30	T 9 Maria Hoernke , Freiburg, GER <i>Leaky membrane fusion: an ambiguous effect induced by antimicrobial polycations</i>	
11:30–11:45	T 10 Christoph Westerhausen , Augsburg, GER <i>Membrane transport in cell ensembles is modulated by the membrane state</i>	
11:45–12:00	T 11 Matthias Wilm , Dublin, IRL <i>Synthesis of large lipid membranes with integrated membrane proteins from gas phase</i>	
Parallel Session 1B – Computational Biophysics I		A 703
11:00–12:00	Chair: Roberto Covino, Frankfurt, GER	
11:00–11:15	T 12 Jochen Hub , Saarbrücken, GER <i>Free energy landscape of pore and stalk formation are controlled by lipid composition and lipidprotein interactions</i>	
11:15–11:30	T 13 Till Rudack , Bochum, GER <i>A scale-spanning integrative modeling strategy to study structure, dynamics, and function of molecular machines</i>	
11:30–11:45	T 14 Hendrik Jung , Frankfurt, GER <i>Artificial intelligence for molecular mechanism discovery</i>	
11:45–12:00	T 15 Marius F. W. Trollmann , Erlangen, GER <i>mRNA lipid nanoparticle phase transition</i>	
Parallel Session 1C – Biospectroscopy I		A 704
11:00–12:00	Chair: Jacek Kozuch, Berlin, GER	
11:00–11:15	T 16 Tilman Kottke , Bielefeld, GER <i>In-cell infrared difference spectroscopy on photoreceptors</i>	
11:15–11:30	T 17 Henrike M. Müller-Werkmeister , Potsdam, GER <i>Time-resolved serial crystallography of an enzyme at work: the role of lasers, timing, and spectroscopy</i>	
11:30–11:45	T 18 Ellen Adams , Dresden, GER <i>Key role of the solvent in driving liquid-liquid phase separation</i>	
11:45–12:00	T 19 Lara Williams , Konstanz, GER <i>Site-directed labelling with photoexcitable spin labels for light-induced dipolar spectroscopy</i>	
12:00–12:30	T 20 Christian Bamann , DFG	A 701
	<i>DFG-funding opportunities for graduates of Life Sciences</i>	
12:00–13:00	Lunch Break	
Plenary Session 3		Audimax
13:00–14:30	Chair: Helmut Grubmüller, Göttingen, GER	
13:00–13:30	T 21 Mike Heilemann , Frankfurt, GER <i>Quantification of protein subunits in dense clusters using kinetics-assisted quantitative super-resolution microscopy</i>	
13:30–14:00	T 22 Frauke Gräter , Heidelberg, GER <i>How collagen converts mechanical into chemical stress</i>	
14:00–14:30	T 23 Emad Tajkhorshid , Urbana-Champaign, USA <i>Lipid-mediated organization of prestin in the cochlear membrane and implications in sound amplification</i>	
14:30–15:00	Coffee Break	
Poster Session 1		Poster Areas
15:00–16:30		
Industry Talks		A 701
15:00–16:30		
Parallel Session 2A – Biomolecular Interactions		A 701
16:30–17:15	Chair: Luuk van Wilderen, Frankfurt, GER	
16:30–16:45	T 24 Nils-Alexander Lakomek , Düsseldorf, GER <i>Structural dynamics of intrinsically disordered proteins at the membrane interface: recent insights into the pre-fusion state of SNARE proteins by NMR spectroscopy</i>	
16:45–17:00	T 25 Radek Šachl , Prague, CZ <i>In-membrane protein oligomerization as a critical step for membrane pore formation</i>	
17:00–17:15	T 26 Andres Manuel Vera , München, GER <i>Heterogeneous assembly of the cohesin-dockerin interaction and its modulation by isomerization of a single proline</i>	
Parallel Session 2B – Channels and Transporters		A 703
16:30–17:15	Chair: Jörg Fitter, Aachen, GER	
16:30–16:45	T 27 Indra Schroeder , Jena, GER <i>Role of ion distribution and energy barriers for concerted motion of subunits in selectivity filter gating of a K⁺ channel</i>	
16:45–17:00	T 28 Marcus Schewe , Kiel, GER <i>An alternative mechanism of Kv channel inhibition: binding of cellular lipids to side-pockets induces C-type inactivation</i>	
17:00–17:15	T 29 Abhishek Acharya , Bremen, GER <i>A mechanistic view of the role of L3 loop conformational dynamics in antibiotic permeation and gating in OmpF</i>	
Parallel Session 2C – Genetic Regulatory Systems		A 704
16:30–17:15	Chair: Karim Fahmy, Dresden, GER	
16:30–16:45	T 30 Hannes Witt , Amsterdam, NL <i>The mechanics of mitotic chromosomes</i>	
16:45–17:00	T 31 Michelle Paulina Rademacher , Düsseldorf, GER <i>Time-resolved spectroscopy of an angular psoralen intercalated into DNA</i>	
17:00–17:15	T 32 Alice Frederike Rosa Grün , Hamburg, GER <i>Structural analysis of the interaction of the herpes simplex virus 1 terminase with secondary DNA structures</i>	
17:30	Departure for Boat Trip	
19:30–22:00	Conference Dinner Konzil	