Monday, September 24th 2018

09:30	**Departure - Coffee**
Session 1	Chairperson: Claudia Steinem
10:00 – 10:10	**Welcome – Claudia Steinem**
10:10 – 10:55	**Leonid Chernomordik** Dissecting membrane fusion pathways in viral entry and in development
10:55 – 11:20	**Marcus Müller** Thermodynamically reversible path of stalk formation
11:20 – 11:45	**Gregory Bubnis** A stepwise mechanism for membrane poration determined by MD simulations
11:45 – 12:10	**Andreas Janshoff** Physics of membrane fusion revealed by colloidal probe microscopy lecture
12:10 – 12:35	**Claudia Steinem** SNARE-mediated single vesicle fusion of chromaffin granules and reconstituted vesicles with pore-spanning membranes
12:40 – 13:45	**Lunch break**
Session 2	Chairperson: Andreas Janshoff
13:45 – 14:00	**Reinhard Jahn** Introduction Axel Brunger (Balzan lecture)
14:00 – 14:45	**Axel Brunger (Balzan lecture)** Molecular mechanisms of neurotransmitter release
14:45 – 15:10	**Tim Salditt** Membrane docking and fusion studied by x-ray diffraction
15:10 – 15:35	**Herre Jelger Risselada** Does microscopic membrane fusion benefit from voluminous protein?
15:35 – 16:00	**Reinhard Jahn** Targeting and fusion mediated by endosomal SNARE proteins
16:00 – 16:30	**Coffee break**
Session 3	Chairperson: Reinhard Jahn
16:30 – 17:15	**Andreas Zumbühl** Mechanoresponsive drug delivery
17:15 – 17:40	**Daniel B. Werz** Synthesis of fluorescent Gb_3 glycosphingolipids and their phase behavior in giant unilamellar vesicles
17:40 – 18:25	**Frauke Gräter** Mechano-sensing through and at membranes
18:25 – 18:50	**Peter Jomo Walla** Docking and membrane distances regulated by Synaptotagmin 1, SNARES and artificial SNARE model peptides
19:00	**Poster session (warm buffet)**

Tuesday, September 25th 2018

Session 4	Chairperson: Markus Zweckstetter
09:00 – 09:45	**Sebastian Hiller** Mechanisms in outer membrane protein folding and biogenesis
09:45 – 10:10	**Loren Andreas** Folded and misfolded proteins in membranes by NMR
10:10 – 10:35	**Karin Halbmair** Semi-rigid spin labels and long-range EPR distance measurements reveal the structure of model peptides in lipid bilayers
10:35 – 11:00	**Coffee break**
Session 5	Chairperson: Marina Bennati
11:00 – 11:45	**Antoinette Killian** The styrene-maleic acid copolymer: a versatile tool in membrane research
11:45 – 12:10	**Ulrike Rost** Characterisation and functionalisation of artifical transmembrane β-peptides
12:10 – 12:35	**Markus Zweckstetter** The mitochondrial translocator protein TSPO
12:35 – 14:00	**Lunch break (individual arrangements)**
Session 6	Chairperson: Loren Andreas
14:00 – 14:45	**Marc D. Binder** Cooperative gating of adjacent L-type calcium channels within surface membrane clusters formed by stochastic self-assembly enhances calcium influx
14:45 – 15:10	**Bert de Groot** The molecular dynamics of potassium channel permeation, selectivity and mechanogating
15:10 – 15:35	**Jochen Hub** Free-energy calculations of pore formation in lipid membranes reveal determinants for metastable pores
15:35 – 16:00	**Florian Pein** Statistical analysis of patch clamp recordings
16:00 – 16:30	**Coffee break**
Session 7	Chairperson: Ingo Mey
16:30 – 17:15	**Daniel Fletcher** Physical segregation of proteins at cell-cell interfaces
17:15 – 17:40	**Thomas Waitz** Bridging the gaps between science and society
	Walk to the Historische Sternwarte (Historic Observatory)
ca. 18:00	**Guided tour *Historische Sternwarte (Historic Observatory)*** Guest speaker and PIs
19:00	**Conference dinner – *Restaurant Planea*** **Guest speaker and PIs**

Wednesday, September 26th 2018

Session 8	Chairperson: Michael Meinecke
09:00 – 09:45	**David Cafiso** Protein allostery, transmembrane signaling and energy-coupling between membranes in a bacterial transport family
09:45 – 10:10	**Camilo Aponte-Santamaria** Temperature dependence of protein-water interactions in a membrane-transport channel
10:15 – 10:45	**Coffee break**
Session 9	Chairperson: Jochen Hub
10:45 – 11:30	**Joseph Lyons** Structural and functional studies of lipid flippases
11:30 – 11:55	**Michael Meinecke** Lipid dependent oligomerization of the ENTH domain drives membrane remodeling during clathrin mediated endocytosis
11:55	**Departure**