

# Program:

Wednesday			
14:00		Arrival, check-in and coffee	
<b>Section I - chair: Martin Balašík</b>			
16:10	16:15	Opening remarks	
16:15	16:30	Elisabeth Fischer-Friedrich	Epithelial-mesenchymal transition and its influence on actin-cytoskeletal regulation and cell proliferation
16:30	16:45	Ludek Stepanek	Mechanical Probing of the Intraflagellar Transport.
16:45	17:00	Aniruddha Mitra	Sorting at ciliary base and ciliary entry of BBSome, IFT-B and IFT-A
17:00	17:15	Lukáš Čajánek	Elucidating the role of kinesin KIF14 in primary cilia
17:15	17:30	David Palounek	Progress in ultrafast tracking of the fluctuating dynamics of microtubule depolymerization enlightening a superdiffusional behaviour
Short break			
17:45	18:00	Cordula Reuther	Lattice defect sites accelerate microtubule severing by spastin
18:00	18:15	Tomáš Zakar	Microsecond pulsed electric field alters tubulin and its self-assembly competence
18:15	19:00	Carsten Janke	Diversifying cytoskeletal functions with the tubulin code
19:00		Diner	
<b>Posters</b> and beer			
Thursday			
7:00	9:30	Breakfast	
<b>Section II - chair: Elisabeth Fischer-Friedrich</b>			
9:30	9:45	Abhinav Singh	Dynamical Instabilities in 3D Cytoskeletal Materials
9:45	10:00	Jakub Gemperle	Magnetogenetic spatiotemporal control of Rab25 endosomes triggers mechanosensory and invasive cell phenotypes in 3D matrix
10:00	10:15	Alexandre Beber	Anillin promotes the contraction of actomyosin networks
10:15	10:30	Magdalena Přečková	Plectin-mediated cytoskeletal crosstalk protects epithelia against mechanical stress-induced damage
Coffee and <b>Posters</b>			
<b>Section III - chair: Teije Middelkoop</b>			
11:00	11:45	Martin Harterink	Axon-dendrite polarity establishment in <i>C. elegans</i>
11:45	12:00	Rachele Catalano	Investigating the effect of motor density and diffusivity on the transport of vesicular cargo along microtubules with tau envelopes
12:00	12:15	Jaromír Novák	Role of Miro1 in horizontal mitochondrial transfer in tumor microenvironment
12:15		Lunch	

### Section IV - chair: Marek Piliarik

14:30	14:45	Archit Bhatnagar	Axis Convergence in <i>C. elegans</i> embryos
14:45	15:00	Ondřej Kučera	Emergence of chirality in microtubule arrays
15:00	15:15	Benjamin Friedrich	Sarcomere self-assembly
15:15	15:30	Libor Macůrek	FAM110A promotes mitotic spindle formation by linking microtubules with actin cytoskeleton
15:30	15:45	María José Ruiz Estrada	TRAK1 role in mitochondrial dynamics and neuronal development
Coffee and <b>Posters</b> - group picture			

### Section V - chair: Stefan Diez

16:15	17:00	Robert Cross	The subtle allostery of kinesin and tubulin
17:00	17:05	Sjak van Grootel	Evolution of actomyosin-driven morphogenesis
17:05	17:10	Mario Adrian Martinez Monleon	EVOLUTIONARY TRENDS IN THE ACTOMYOSIN CELLULAR CORTEX
17:10	17:15	Adéla Karhanová	Tau phosphorylation impedes functionality of protective tau envelopes
17:15	17:20	Daria Khuntsariya	Microtubule doublet assembly in vitro and its regulation by PACRG and FAP20
17:20	17:25	Pavčina Šliková	Anillin promotes actomyosin contractility by mechanical tethering
17:25	17:30	Vadym Sulimenko	ARF GTPase-activating protein GIT2 regulates microtubule nucleation in mouse bone marrow-derived cells
17:30	17:35	Tereza Humhalová	Loss of endosomal actin leads to osmotic swelling of late endosomes
17:35	17:40	Eugene Christou Vaidyanathan Rhymend	Optimization of microtubule gliding assay in low ionic strength buffers for molecular diagnostics and electrical detection applications
17:40	18:45	Lukas Niese	A detailed study of helical microtubule sliding by mitotic motor proteins
17:45	17:50	Ján Sabó	CKAP5 enables formation of persistent actin bundles templated by dynamically instable microtubules
17:50	17:55	Ondrej Cehlar	Structure and dynamics of the microtubule binding motifs on the neuronal protein tau probed by specific antibodies
17:55	18:00	Karel Smetana, Jr.	Smooth muscle actin-gamma is a potential new marker of cancer-associated fibroblasts (CAFs)
19:00	Dinner Social event		

Friday			
7:00	9:30	Breakfast and check-out (until 11 a.m.)	
<b>Section VI - chair: Benjamin Friedrich</b>			
9:30	9:45	Manjari Prakash	Optineurin tethers anterograde mitochondrial complex to microtubules to promote axonal mitochondrial transport
9:45	10:00	Fatima Cvrčková	Plant Class I formins: passengers or active cargoes of membrane trafficking?
10:00	10:15	Vladimir Varga	Characterization of the full complement of the flagellum distal end proteins identified those involved in axonemal construction and length regulation
10:15	10:30	Subhadip Chakraborty	Understanding the mechanochemical transitions that underlie early embryo development
10:30	10:45	Jana Nedvědová	Structure-function studies of polyglutamylase TLL11
10:45	11:00	Arya Krishnan	Tubulin Code: Generating recognition patterns to selectively direct Microtubule-Associated Proteins
Coffee and <b>Posters</b>			
<b>Section VII - chair: Michal Cifra</b>			
11:20	11:35	Pavel Kielkowski	Deconvolution of tubulin PTMs by chemical proteomics.
11:35	11:50	Martin Striegler	Twist-torsion coupling in beating axonemes
11:50	12:35	François Nédélec	Simple Chromosome Partitioning Mechanisms and a Mitotic Spindle.
12:35	12:40	Concluding remarks	
	12:50	Lunch	
		Departure	