## JGU Workshop Computational Brain Science

Feb 09 2018 • Senatssaal A3.01, Hochschule Mainz, Lucy-Hillebrand-Str. 2, Mainz

## Schedule

Time	Speaker	Topic				
9:00-9:05	Welcome / Workshop Mechanics					
Resilience						
9:05-9:25	Oliver Tüscher & Team	How to integrate self-report data qualitatively and over time				
		Searching for a neural signature of interference inhibition across cognitive control domains				
9:25-9:35		(Discussion)				
9:35-10:05	Raffael Kalisch	Integrative analysis and modelling of multidimensional longitudinal real-world data				
	Kenneth Yuen	Multivariate and multidimenional modeling of functional neuroimaging data				
	Benjamin Meyer	Using resting state functional MRI to predict task-related brain				
10:05-10:20	(Discussion)					
10:20-10:30	Coffee Break					
		Genes and Gene Regulation				
10:30-11:00	Susann Schweiger	The Tsc2KO mouse model to study the influence of aberrations in mTOR homeostasis on synaptic function in the hippocampus and the cortex				
	Jennifer Winter	MicroRNA (mis)regulation in neurodevelopment				
	Matthias Linke	Transgenerational epigenetic inheritance of chronic social defeat experience and altered resilience capacity				
11:00-11:15		(Discussion)				
11:15-11:25	Federico Marini	Interactivity meets Reproducibility: the ideal way of doing RNA-seq analysis				
11:25-11:30		(Discussion)				
11:30-11:40	Filippo Calzolari	Deciphering activity-dependent patterns of gene expression activity and their impact on oligodendroglial dynamics				
11:40-11:45		(Discussion)				
	Benedikt Berninger	(Discussion) Probing human neurogenesis by direct lineage reprogramming				

12:00-13:00	Lunch Break (provided for registered participants)				
Systems and Network Approaches					
13:00-13:10	Susanne Gerber Integration of Omics Data - a Systems Genetics approach				
13:10-13:15	(Discussion)				
13:15-13:25	Stefan Mueller-Stach Persistent homology: invariants of topological data				
13:25-13:30	(Discussion)				
13:30-13:40	Simon Rumpel Dynamics of neuronal networks in the neocortex				
13:40-13:45	(Discussion)				
13:45-13:55	Michael Wand	el Wand Open questions in "deep" representation learning			
13:55-14:00	(Discussion)				
		Data An	alysis and Prediction		
14:00-14:10	Klaus Lieb	Machine depress	e-learning based prediction of clinical cornerstones in ion		
14:10-14:15	(Discussion)				
14:15-14:25	Marion Silies	arion Silies Genetic dissection of motion computation			
14:25-14:30	(Discussion)				
14:30-14:45	Coffee Break				
14:45-14:55	Maik Stüttgen Spikes, sensations, and decisions				
14:55-15:00	(Discussion)				
			Network analyses		
15:00-15:20	Muthuraman Muthu	uraman	Machine Learning		
15:20-15:30	(Discussion)				
		Ex	tension Session		
15:30-15:55	<b>N.N.</b> General discussion, ad-hoc presentations (~5+5min each).				
15:55-16:00	Closing Session				
from 16:00	Opportunities for further informal discussion (Coffee provided)				

**Notes:** Talks slots are 10min +5min discussion (listed separately above).

Feel free to make them shorter for more discussion. Please take setup time into account (i.e., do not use the full 10min slot for talking). Group blocks are scheduled so that talk time can be freely allocated between the different topics