

# BRAIN DYNAMICS WORKSHOP

## EVENT PROGRAM

### Wednesday 25. 9.

16:00	Coffee break			
16:30	Opening	Jaroslav Hlinka	ICS	
16:45	Keynote	Davide Momi	Stanford University	Modelling of brain stimulation and network dynamics
17:45	Discussions			
18:00	Transfer to dinner including minimal sightseeing			
19:00	Dinner - by own choice - not covered by the project – reservation in the restaurant <i>Stará Praha</i>			
21:00	End of Day			

### Thursday 26. 9.

9:30	Coffee morning			
<b>Topical session 1: Schizophrenia - Multimodal imaging (Chair: Filip Španiel)</b>				
10:00	Talk 1	Filip Španiel	NUDZ	Can long-term brain dynamics unlock the code of schizophrenia?
11:00	Talk 2	David Tomeček	NUDZ	Resting-state functional connectivity in early schizophrenia
11:15	Talk 3	Jaroslav Hlinka/Anna Pidnebesna	ICS/NUDZ	Brain graphs: persistent homology/dojmolgy and other stories
11:30	Coffee break			



Co-funded by  
the European Union



STRATEGIE AV21  
Špičkový výzkum ve veřejném zájmu

<b>12:00</b>	Talk 4	Eduard Bakštejn	CTU/NUDZ	Cinical outcome prediction from multimodal data: lessons learned from the ESO trajectory challenge
<b>12:30</b>	Talk 5	Barbora Reháková Bučková	ICS/NUDZ	Multimodal neuroimaging machine learning for disease and symptom prediction
<b>13:00</b>	Talk 6	Dominik Klepl, Karolína Volfíková, Jakub Svoboda	ICS	machine learning from (f)MRI
<b>13:30</b>	Lunch			
<b>Topical session 2: Psychedelics (Chair: Jiří Horáček)</b>				
<b>14:30</b>	Talk 1	Jiří Horáček	NUDZ	Psychedelic science: from neuroimaging to clinical relevance
<b>15:10</b>	Talk 2	Nikola Jajcay	ICS/NUDZ	Model inference for psychedelics
<b>15:35</b>	Talk 3	Vlastimil Koudelka	NUDZ	Psilobeats: EEG correlates of music perception after psilocybin
<b>16:00</b>	Coffee break			
<b>16:30</b>	Talk 4	Jan Hubený	NUDZ	EEG synchronization of the emerging collective brain during the Ayahuasca ritual: Methods and pilot results
<b>16:50</b>	Talk 5	Veronika Langová	NUDZ	G. petersii fish: A novel model organisms of schizophrenia
<b>17:10</b>	Talk 7	David Greguš	NUDZ	Can cortical thickness predict Psilocybin experience?
<b>17:30</b>	Talk 8	Petr Adámek	NUDZ	Perceptual theory of schizophrenia and its modeling
<b>17:45</b>	Talk 9	Dominika Grygarová	NUDZ	Neurophenomenology: A Refined Approach to Understanding Neural Dynamics
<b>18:00</b>	Dinner - onsite			
<b>19:00</b>	BRADY management meeting (Closed session)			
<b>19:30</b>	Wine networking event - covered			



Co-funded by  
the European Union



STRATEGIE AV21  
Špičkový výzkum ve veřejném zájmu

## Friday 27. 9.

9:30	Coffee morning			
Topical session 3: brain stimulation (TMS, ...) (Chair: Jan Kremláček)				
10:00	Talk 1	Jan Kremláček	LFHK UK	Introduction to NIBS - TMS, tES
10:30	Talk 2	Jan Kremláček	LFHK UK	TMS-EEG - BRADY project
10:30	Talk 3	Shih Cheng Chien	ICS	A Biological Model of Spinal and Peripheral Motor Pathways for TMS-induced MEPS
11:30	Coffee break			
12:00	Talk 4	Monika Klírová	NUDZ	RTMS in clinical settings
12:30	Talk 5	Monika Klírová	NUDZ	Predictors of response to deep transcranial magnetic stimulation treatment in mental disorders
13:00	Talk 6	Nina Biačková	NUDZ	TACS - Background and development of a clinical trial
13:30	Lunch			
14:30	Discussions			
16:00	Final remarks			

### Aknowledgements:

The program was supported by ERDF-Project Brain dynamics, No. CZ.02.01.01/00/22\_008/0004643

The program was supported by Lumina quaeruntur (LQ100302301)

The program was partially supported by the Czech Academy of Sciences program Strategy AV21 Breakthrough Technologies for the Future – Sensing, Digitisation, Artificial Intelligence and Quantum Technologies



Co-funded by  
the European Union



STRATEGIE AV21  
Špičkový výzkum ve veřejném zájmu