

BrainSTIM 2023 program

Friday June 2

8:00-8:45	Registration, coffee & poster set-up
8:45-9:00	Opening: Vincent Clark
9:00-10:15	Keynote 1: Risto Ilmoniemi & Ulf Ziemann <i>Connecting to human brain networks with radically novel TMS technology</i> Chair: Vincent Clark
10:15-11:15	Oral session 1: TMS-EEG (4 x 10 min), chair Timo Roine 1. Ilenia Paparella: <i>GABA concentration relates to physiological measures of synaptic activity in the human motor cortex</i> 2. Gabriel Hassan: <i>TMS-EEG unveils reactivity changes in the occipital cortex of blind individuals</i> 3. Mohammad Daneshzand: <i>Combining a modular multichannel 3-axis TMS coil array with concurrent EEG acquisition</i> 4. Joonas Laurinoja: <i>Feasibility of EEG phase estimation towards closed-loop TMS-EEG inside MRI</i>
11:15-11:45	Coffee break
11:45-12:30	Keynote 2: Juho Joutsa <i>From brain lesions to brain stimulation targets</i> Chair: Satu Jääskeläinen
12:30-14:00	Lunch + Posters + Exhibition
14:00-14:45	Oral session 2 (6 x 4 min), chair Hanna Renvall 1. Orsolya Karácsony: <i>The effect of visual stimuli with an information content on epileptic severity</i> 2. Daniela Rodriguez Manrique: <i>Electrode localisation for electrical field (EF) modelling in tDCS studies using magnetic resonance</i> 3. Jordan Van Zyl: <i>tDCS for Cognitive Enhancement in Alzheimer's Disease: A Randomized Clinical Trial with Neuroimaging</i> 4. Fernando Galaz Prieto: <i>Metaheuristic L1-L1 method in optimizing focal multi-channel tES montages</i> 5. Rajat Joshi: <i>Behavioural validation of individualised low-intensity transcranial electrical stimulation protocols</i> 6. Elena Bondi: <i>The awe experience: a VR-TMS-EEG study</i>
14:45-15:00	Science Factory greetings
15:00-15:30	Coffee break
15:30-16:15	Keynote 3: Christoph Herrmann <i>First simulate then stimulate: Using brain imaging to improve brain stimulation</i> Chair: Risto Ilmoniemi
16:15-16:30	Break
16:30-17:30	<i>Reliability of TMS-EEG</i> , panel discussion with Marta Bortoletto Ulf Ziemann Hartwig Siebner Mario Rosanova Chair: Tuomas Mutanen
18:00	Departure for cruise to dinner
18:00-23:00	Cruise + dinner

Saturday June 3

8:30-9:00	Registration, coffee
9:00-9:45	Keynote 4: Charlotte Stagg <i>Combining multimodal imaging and non-invasive brain stimulation to study human motor control</i> Chair: Til Ole Bergmann
9:45-10:00	Break
10:00-11:15	Oral session 3 (5 x 10 min), chair TBA 1. David Haslacher: <i>Enhancement and suppression of brain oscillations using closed-loop tACS</i> 2. Sampsa Pursiainen: <i>Metaheuristic L1 fitted and regularized (L1-L1) optimization in multi-channel DBS</i> 3. Adrianna Giuffre: <i>TMS biomarkers predict postsurgical seizure outcomes in patients with refractory focal epilepsy</i> 4. Stephanie Lefebvre: <i>Linking altered cortical excitability to neural substrates of the motor network in schizophrenia</i> 5. Shokoofeh Parvin: <i>Effect of stimulus orientation and paired-pulse protocol on the spatial activation of forearm muscle</i>
11:15-11:45	Coffee break
11:45-12:30	Keynote 5: Hanna Renvall <i>Magnetoencephalography - from university to clinic and back</i> Chair: Paolo Belardinelli
12:30-14:00	Lunch + Posters + Exhibition (mTMS workshop for those who have signed up in advance)
14:00-14:45	Oral session 4: TMS-EEG (5 x 4 min), chair Tuomas Mutanen 1. Danylo Lucio Ferreira Cabral: <i>Neurophysiological correlates of lifestyle diabetes care: A theoretical framework</i> 2. Dominika Sulcova: <i>TMS-evoked potentials as biomarkers of cortical excitability: combining microstate and peak analysis</i> 3. Davide Bonfanti: <i>Parietal phosphenes reveal asymmetric spatiotemporal dynamics between left and right IPS</i> 4. Melina Engelhardt: <i>Repetitive TMS to facilitate recovery of motor deficits after supratentorial tumor resection</i> 5. Valentina Pezzopane: <i>Default Mode Network connectivity abnormalities in Alzheimer disease: a multi-level approach study</i>
14:45-15:00	Break
15:00-16:00	Oral session 5: TMS-EEG (4 x 10 min), chair Pantelis Lioumis 1. Joëlle Schroën: <i>From Temporal to Frontal Cortex and Back: Testing the Dynamics of Speech Comprehension with TMS-EEG</i> 2. Giacomo Guidali: <i>Unveiling the neurophysiological substrates of a visuo-motor PAS protocol: a TMS-EEG study</i> 3. Xavier Corominas: <i>Exploring the potential impact of very low-intensity TMS on humans: a TMS-EEG study</i> 4. Mikkel Beck: <i>The impact of methodological choices: a systematic review of TMS-EEG studies targeting the M1</i>
16:00-16:30	Coffee break
16:30-17:15	Oral session 6: TMS and EEG (6 x 4 min), chair Matti Stenroos 1. Joonas Lahtinen: <i>Adaptive Method for Non-Invasive EEG/MEG Source Localization to Support Focal Epileptic Treatments</i> 2. Johannes Vorwerk: <i>Sensitivity of EEG forward and inverse solutions to conductivity uncertainties</i> 3. Thais Marchetti: <i>Decision-making in transcranial magnetic stimulation robotized positioning</i> 4. Harri Piitulainen: <i>Change in TMS stimulus orientation alters spatial activation of the forearm muscles</i> 5. Fang Jin: <i>Assessing the overlap of cortical representations for hand and forearm muscles using navigated TMS</i> 6. Tuomas Mutanen: <i>Suppressing TMS-evoked EEG Artifacts: A Simulation Study Comparing ICA and SSP</i>
17:15-17:30	Break
17:30-18:15	Keynote 6: Vincent Clark <i>Fifteen years of BrainSTIM in my laboratory: What have we learned, and what's next?</i> Chair: Risto Ilmoniemi
18:15-18:30	Closing: Vincent Clark