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** *Connecting to human brain networks with radically novel TMS technology* Chair: Vincent Clark
10:15–11:15	Oral session 1: **TMS–EEG** (4 x 10 min), chair Timo Roine 1. Ilenia Paparella: *GABA concentration relates to physiological measures of synaptic activity in the human motor cortex* 2. Gabriel Hassan: *TMS-EEG unveils reactivity changes in the occipital cortex of blind individuals* 3. Mohammad Daneshzand: *Combining a modular multichannel 3-axis TMS coil array with concurrent EEG acquisition* 4. Joonas Laurinoja: *Feasibility of EEG phase estimation towards closed-loop TMS–EEG inside MRI*
11:15–11:45	Coffee break
11:45–12:30	Keynote 2: **Juho Joutsa** *From brain lesions to brain stimulation targets* Chair: TBA
12:30–14:00	Lunch + Posters + Exhibition
14:00–14:45	Oral session 2 (6 x 4 min), chair Hanna Renvall 1. Orsolya Karácsony: *The effect of visual stimuli with an information content on epileptic severity* 2. Daniela Rodriguez Manrique: *Electrode localisation for electrical field (EF) modelling in tDCS studies using magnetic resonance* 3. Jordan Van Zyl: *tDCS for Cognitive Enhancement in Alzheimer's Disease: A Randomized Clinical Trial with Neuroimaging* 4. Fernando Galaz Prieto: *Metaheuristic L1–L1 method in optimizing focal multi-channel tES montages* 5. Rajat Joshi: *Behavioural validation of individualised low-intensity transcranial electrical stimulation protocols* 6. Elena Bondi: *The awe experience: a VR-TMS-EEG study*
14:45–15:00	Science Factory greetings
15:00–15:30	Coffee break
15:30–16:15	Keynote 3: **Christoph Herrmann** *First simulate then stimulate: Using brain imaging to improve brain stimulation* Chair: Risto Ilmoniemi
16:15–16:30	Break
16:30–17:30	*Reliability of TMS–EEG*, 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** *Combining multimodal imaging and non-invasive brain stimulation to study human motor control* Chair: TBA
9:45–10:00	Break
10:00–11:15	Oral session 3 (5 x 10 min), chair TBA 1. David Haslacher: *Enhancement and suppression of brain oscillations using closed-loop tACS* 2. Sampsa Pursiainen: *Metaheuristic L1 fitted and regularized (L1-L1) optimization in multi-channel DBS* 3. Adrianna Giuffre: *TMS biomarkers predict postsurgical seizure outcomes in patients with refractory focal epilepsy* 4. Stephanie Lefebvre: *Linking altered cortical excitability to neural substrates of the motor network in schizophrenia* 5. Shokoofeh Parvin: *Effect of stimulus orientation and paired-pulse protocol on the spatial activation of forearm muscle*
11:15–11:45	Coffee break
11:45–12:30	Keynote 5: **Hanna Renvall** *Magnetoencephalography - from university to clinic and back* Chair: TBA
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: *Neurophysiological correlates of lifestyle diabetes care: A theoretical framework* 2. Dominika Sulcova: *TMS-evoked potentials as biomarkers of cortical excitability: combining microstate and peak analysis* 3. Davide Bonfanti: *Parietal phosphenes reveal asymmetric spatiotemporal dynamics between left and right IPS* 4. Melina Engelhardt: *Repetitive TMS to facilitate recovery of motor deficits after supratentorial tumor resection* 5. Valentina Pezzopane: *Default Mode Network connectivity abnormalities in Alzheimer disease: a multi-level approach study*
14:45–15:00	Break
15:00–16:00	Oral session 5: **TMS–EEG** (4 x 10 min), chair Pantelis Lioumis 1. Joëlle Schroën: *From Temporal to Frontal Cortex and Back: Testing the Dynamics of Speech Comprehension with TMS-EEG* 2. Giacomo Guidali: *Unveiling the neurophysiological substrates of a visuo-motor PAS protocol: a TMS-EEG study* 3. Xavier Corominas: *Exploring the potential impact of very low-intensity TMS on humans: a TMS-EEG study* 4. Mikkel Beck: *The impact of methodological choices: a systematic review of TMS-EEG studies targeting the M1*
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: *Adaptive Method for Non-Invasive EEG/MEG Source Localization to Support Focal Epileptic Treatments* 2. Johannes Vorwerk: *Sensitivity of EEG forward and inverse solutions to conductivity uncertainties* 3. Thais Marchetti: *Decision-making in transcranial magnetic stimulation robotized positioning* 4. Harri Piitulainen: *Change in TMS stimulus orientation alters spatial activation of the forearm muscles* 5. Fang Jin: *Assessing the overlap of cortical representations for hand and forearm muscles using navigated TMS* 6. Tuomas Mutanen: *Suppressing TMS-evoked EEG Artifacts: A Simulation Study Comparing ICA and SSP*
17:15–17:30	Break
17:30–18:15	Keynote 6: **Vincent Clark** *Fifteen years of BrainSTIM in my laboratory: What have we learned, and what's next?* Chair: Risto Ilmoniemi
18:15–18:30	Closing: Vincent Clark