



CERTIFICATE OF ATTENDANCE

This is to certify that

Mehdi Hamedi

attended the virtual **Computational Psychiatry Course 2022** organized by the Translational Neuromodeling Unit, University of Zurich & ETH Zurich. This five-day course (12.09.-16.09.2022) was designed to provide students with the necessary toolkit to master challenges in computational psychiatry research. The course not only taught the theory of computational modeling, but also demonstrated open source software in application to example data sets.

- Day 1, Clinical Psychiatry:
Schizophrenia, depression and affective Disorders, autism, psychosomatics, fatigue
- Day 2, Modeling Basics & Models of Perception:
Mathematical basics, building a model, fitting a model (maximum likelihood, VB & MCMC), Bayesian model selection, models of perception (psychophysics & Bayesian models)
- Day 3: Models of Perception, Action Selection & Models of Metacognition:
Reinforcement learning, models of perception (predictive coding), Hierarchical Gaussian Filter (HGF), models of action selection (MDPs, Active Inference & DDMS), models of metacognition
- Day 4: Models of Connectivity & Machine Learning:
Models of connectivity (DCM for fMRI & EEG, biophysical network models), machine learning (basics & advanced)
- Day 5: Computational Psychiatry in Application:
Talks by international experts on concrete applications of computational models to clinical problems: Olivia Harrison, Fabien Vinckier, Albert Powers, Michael J. Frank, Sam Gershman, Anne Collins

Zurich, 18.09.2020

Prof. Klaas Enno Stephan, MD Dr.med. PhD
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