



CERTIFICATE OF ATTENDANCE

This is to certify that

Amin Saberi

attended the virtual **Computational Psychiatry Course 2020** organized by the Translational Neuromodeling Unit, University of Zurich & ETH Zurich. This five-day course (07.09.-11.09.2020) 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, affective Disorders, bipolar disorders, psychosomatics, addiction
- Day 2, Modeling Basics:
Mathematical basics, building a model, fitting a model (maximum likelihood, VB & MCMC), Bayesian model selection, reinforcement learning
- Day 3: Models of Perception and Action Selection:
Models of perception (psychophysics, Bayesian models & predictive coding), Hierarchical Gaussian Filter (HGF), Models of action selection (MDPs, Active Inference & DDMs)
- Day 4: Machine Learning and Models of Connectivity:
Models of connectivity (DCM for fMRI & EEG), Models of connectivity (Advanced), machine learning (basics & advanced)
- Day 5: Computational Psychiatry in Application:
Talks by international experts on concrete applications of Computational Models to clinical problems: Michael Breakspear, Marta Garrido, Katja Wiech, Philipp Homan, Sahib Khalsa, Sonia Bishop
- Day 6: Practical tutorials with open source software

Zurich, 11.09.2020

Prof. Klaas Enno Stephan, MD Dr.med. PhD
Director, Translational Neuromodeling Unit