

Mini-Workshop: Developing a mathematical theory for co-evolutionary dynamical networks (MTCED)

Organizer: Erik A. Martens, version: May 29, 2023

Programme Tue May 30, 2023. Location: MH:333

- Time: 9.00-9.30
Serhiy Yanchuk, Potsdam Institut f. Klimaforschung, DE
Title: "Recurrent synchronization in adaptive networks"
- Time: 9.30-10.00
Felix Augustsson, Centre for Mathematical Science, Lund University, SE
Theta neurons with adaptive coupling
- ~~Time: 9.30-10.00
CANCELLED: Christian Kuehn, TU Munich, DE; ONLINE: ZOOM-link
Adaptive and Polyadic Network Dynamics~~
- short break —
- Time: 10.30-11.00
Matthias Wolfrum, Weierstrass Institut, DE
Title: Bumps, chimera states, and Turing patterns in systems of coupled active rotators
- Time: 11.00-11.30
Pär Halje, Integrative neurophysiology, Lund University, SE
Synchronous high-frequency oscillations induced by psychedelics in the rat

Programme Wed May 31, 2023, Location: MH:333

- Time: 9.00-9.30
Chuang Xu, University of Hawaii, USA; ONLINE: ZOOM-link
Limits of Adaptive Heterogeneous Networks
- Time: 9.30-10.00
Marius Yamakou, Friedrich-Alexander-Universität Erlangen-Nürnberg, DE
Noise-induced resonance phenomena in neural networks driven by one and two different forms of adaptive rules.
- break —
- Time: 10.50-11.20
Christian Bick, Vrije Universiteit Amsterdam, NL
Title: Phase oscillators on evolving networks in neuroscience: Dimension reductions and scale separation
- Time: 11.20-11.50
Konstantin Klemm, IFISC, Spain
Bifurcations and multistability in adaptive vascular networks

We gratefully acknowledge The Swedish Royal Physiographic Society for financial support.