



Seminar



Dynamics and Control of Complex Networks

**Prof. Dr. Dr.h.c. Eckehard Schöll, PhD,
Dr. Anna Zakharova, Dr. Iryna Omelchenko**

**Summer Semester 2018
EW 731 - Tuesdays 16:15**

The seminar offers perspectives on our current research in the area of Nonlinear Dynamics and Control. The seminar is particularly suitable for BSc and MSc students looking for a final project. Students, who want to obtain a Seminarschein, are welcome as well.

The nonlinear dynamics on complex networks is a field of active research with wide range of applications in physics, chemistry, biology, technology, for instance neuronal networks, coupled lasers, electronic circuits, power grids, transportation networks, or social networks. In the focus of the seminar will be recent studies of complex networks, collective dynamics and synchronization of patterns. We will pay attention to complex topologies such as multilayer, multiplex, or multi-community networks. We will discuss aspects and methods of control for spatio-temporal patterns observed in complex networks.

Literature: <http://www.itp.tu-berlin.de/schoell/nlds/seminare/>

Schedule and Organization

If you are interested in a particular topic, please contact one of the advisors. Final assignment of the topics will be done on 17.04.2018.

Contact

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Theoretical methods and concepts of application