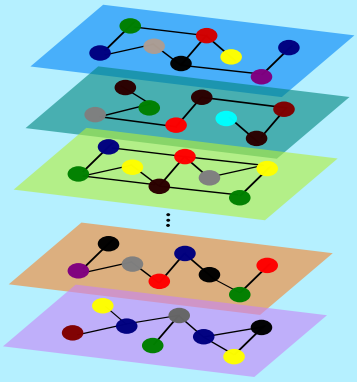
Seminar

Dynamics of multilayer networks



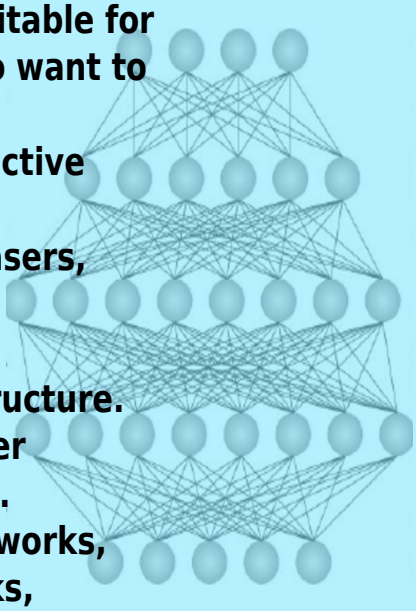
Prof. Dr. Dr.h.c. Eckehard Schöll, PhD,
Dr. Anna Zakharova, Dr. Iryna Omelchenko

Winter Semester 2018/2019

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 multilayer networks is a field of active research with wide range of applications in physics, chemistry, biology, technology, for instance neuronal networks, coupled lasers, power grids, transportation networks, or social networks. In brain networks, for example, functional and structural connectivities can be seen as layers of a complex multilayer structure.



In the focus of the seminar will be recent studies of multilayer networks, collective dynamics and synchronization of patterns. We will pay attention to dynamical properties of multilayer networks, role of symmetries, control of multilayer and multiplex networks, as well as their various applications.

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 16.10.2018.

Contact

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