Seminar of Research Group Schöll
LV-Nr. 3233 L 607 G-RISC Seminar

Applications of Complex Networks

Prof. Dr. Eckehard Schöll, PhD
Dr. Anna Zakharova, Dr. Philipp Hövel
Winter Semester 2014/2015
EW 731 – Tuesdays 12:15
Beginning: 14 October 2014

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 applications in diverse fields such as physics, chemistry, biology, technology, or socio-economic systems, for instance coupled lasers, neuronal networks, genetic regulatory networks, electronic circuits, chemical or electrochemical oscillators, power grids, transportation networks, or the internet. The seminar will focus on spatio-temporal patterns like full or partial synchronization, stabilization of inhomogeneous steady states (oscillation death), and chimera states which consist of coexisting domains of spatially coherent (synchronized) and incoherent (desynchronized) behavior.

References can be found here: 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 October 14, 2014.

Contact

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