



Seminar



Patterns of dynamics in complex networks

Prof. Dr. Anna Mandel-Zakharova

Leonhard Schülen

Winter Term 2021

Online via Zoom and ER 164 – Wednesday 12:15

The seminar offers perspectives on our current research in the field of Nonlinear Dynamics in Complex Networks. 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.

This semester, we focus on patterns of dynamics in complex networks. Complex dynamical patterns arise in nonlinear systems of different nature and have applications in various fields of research. The proposed topics range from partial synchronization patterns and phase transitions to resonance phenomena and time-delay effects. The applications of considered topics include neural and brain systems, optical systems and power grid networks, memristors and machine learning.

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 20.10.2021.

Contact:

Prof. Dr. Anna Mandel-Zakharova, PhD

Leonhard Schülen

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Theoretical methods and concepts of application.