Computer-assisted proofs, proof assistants and visualization in dynamical systems



Contribution ID: 5 Type: **not specified**

Spectra of transfer and Koopman operators

Tuesday, 18 June 2024 16:40 (50 minutes)

This talk will be about computation and approximation of spectral data of transfer operators and Koopman operators associated to holomorphic expanding and hyperbolic discrete dynamical systems. I will present a special class of systems with explicitly computable eigenvalues. In a more general setting, I will discuss convergence results of algorithms such as Lagrange-Chebyshev or EDMD to approximate spectral data and obtain rigorous bounds in various applications.

Presenter: Prof. SLIPANTSCHUK, Julia (University of Warwick)