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Universität Hamburg
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Fakultät für
Mathematik, Informatik
und Naturwissenschaften

Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 18. Juni 2019

17 Uhr s.t., Geom H4

Jun.-Prof. Dr. Tobias Weich
(Universität Paderborn)

Dynamical resonances -- From convergence to equilibrium to spectral geometry

Abstract:

Dynamical resonances have their origin in the study of chaotic dynamical systems. They were originally introduced by Ruelle and Pollicott in the 1980s to study the convergence to equilibrium. During the last years a new spectral theoretic approach to dynamical resonances has been developed and thanks to these new techniques dynamical resonances became an interesting object in spectral geometry and topology.

In a first part of this talk we introduce the notion of dynamical resonances and their implications for the decay of correlations. We will in particular focus on the modern spectral theoretical approach and explain how Ruelle resonances are related to poles of meromorphically continued resolvents. In the rest of the talk we will turn towards spectral geometric applications of dynamical resonances.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.