

Differential Equations and Applied Math Seminar

Dr. Rui Han, Louisiana State University

12-1pm February 17th, 2023

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Title: Avila's acceleration via zeros of determinants, and applications to the Schrödinger cocycles

Abstract: As a corner stone of his global theory, Avila exhibited quantization of the slope of the Lyapunov exponent (acceleration). In this talk we introduce a characterization of Avila's quantized acceleration via the number of zeros of the Dirichlet determinants in finite volume. We will also talk about applications of this characterization to Schrödinger cocycles, including Hölder continuity of the integrated density of states and Anderson localization. This talk is based on joint work with Wilhelm Schlag.

Interested faculty, graduate and undergraduate students are encouraged to attend.