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"Quantum Chaos, Quadratic Forms and Fibonacci Numbers"

Monday, February 20, 2023 Talk at 4:10 pm Park Science Building, Room 338

This is a joint talk with the Philadelphia Area Number Theory Seminar.

Abstract:

In this talk we show how elementary and advanced number theory can be used to shed light on a deep question in spectral geometry: what is the eigenvalue distribution of a compact Riemannian manifold? In the simplest case of a flat torus, this has rather surprising arithmetic features and offers a fascinating interplay between number theory and analysis.

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