

On the history of the length spectrum

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008 Kemeny Hall, 4:00 pm
(Tea 3:30 pm 300 Kemeny Hall)

Abstract

The lecture is about the astounding discovery of the length spectrum of a compact Riemann surface. We shall begin with Euler back in 1737, then move to Wiener's proof of the prime number theorem in 1932 and its impact to the study of a vibrating membrane. After that we shall concentrate on hyperbolic lattice points for a while and then finally see how this led to the "invention" of the length spectrum with its many amazing properties. The lecture will finish with a list of recent results.