

Extremality and dynamically defined measures

David Simmons, Ohio State University

We consider a class of measures from Diophantine approximation known as $\text{\emph{extremal}}$ measures. The class of measures known to be extremal has expanded in recent years to include not only the Lebesgue measures of nondegenerate manifolds, but also various measures defined using conformal dynamics. In this talk I will describe this history as well as describing a new geometric condition which implies extremality, giving examples of dynamical measures satisfying this condition which could not previously be proven to be extremal.

This work is joint with Tushar Das, Lior Fishman, and Mariusz Urbański.