

Title: Inhomogeneous self-similar sets and dimensions

Speaker: Jonathan Fraser

Date: 8th May, 2012.

Abstract

I will investigate the dimensions of inhomogeneous self-similar sets. If a dimension function is countably stable (the dimension of a countable union of sets is equal to the supremum of the individual dimensions), then the dimension is easy to compute. In particular, the dimension is the maximum of the dimension of the corresponding homogeneous self-similar set and the dimension of the condensation set. However, if a dimension function is not countably stable, then the problem is more difficult. As such we investigate the box dimensions, which are of course not countably stable.