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Seminar

Hausdorff dimension of self-similar measures with complicated overlaps

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Abstract

In this talk, we consider a family of self-similar iterated function system (IFS), where at least two maps share the same fixed point. Since the maps, which share the same fixed point, commute, this results complicated overlaps, and typically the weak separation condition does not hold. The dimension of the attractor is well understood by taking sufficiently large subsystems. However, this cannot be applied in order to determine the dimension of invariant measures. Here, we present a method based on the previous results of Feng and Hu, and Kamaltudinov and Tetenov, which allows us to calculate the dimension of self-similar measures for typical parameters in measure theoretic a topological sense. This is a joint project with Edina Szvak.

Date: 20 November 2018 (Tuesday)
Time: 2:30pm – 4:30pm
Venue: Room 219, Lady Shaw Building,
The Chinese University of Hong Kong, Shatin

All are Welcome