

Title: Hausdorff dimension of Besicovitch sets of Cantor graphs

Abstract: It is well known that planar Besicovitch sets – sets containing a unit line segment in every direction – have Hausdorff dimension 2. In a joint work with Iqra Altaf and Marianna Csörnyei we consider Besicovitch sets of Cantor graphs in the plane– sets containing a rotated (and translated) copy of a fixed Cantor graph (its line segments of course removed) in every direction, and prove lower bounds for their Hausdorff dimension.