

Hausdorff dimension of the Rauzy gasket

Natalia Jurga
University of St Andrews

The Rauzy gasket is a fractal subset of the two dimensional simplex which is an important subset of parameter space in numerous dynamical and topological problems. Arnoux conjectured that the Hausdorff dimension of the Rauzy gasket is strictly less than 2, and since then there has been considerable interest in computing its Hausdorff dimension.

In this talk we will also discuss the Furstenberg measures for the action of the generators of the Rauzy gasket on the projective plane. We will discuss how recent developments in the theory of self-affine measures can be adapted to compute the dimension of these Furstenberg measures, which will allow us to establish an exact value for the Hausdorff dimension of the Rauzy gasket.