

## Dynamical Systems Seminar

**Date.** October 2nd, 14h30 (Friday)

**Place.** Room FC1.031

**Speaker.** Mark Pollicott (Warwick University)

**Title.** Bounds on the Dimension of the Rauzy Gasket via Dynamical Systems

**Abstract.**

For simple fractal sets (such as the Sierpinski triangle) the dimension is explicitly known. For more general limit sets of a conformal iterated function scheme (a family of conformal contracting maps satisfying the open set condition) the dimension is known implicitly via the pressure function and Bowen's formula. Unfortunately, this breaks down when the contractions are not strict or are not conformal. However, some of the thermodynamic ideas can still be adapted to get bounds in some key cases. One such example is the Rauzy gasket, which has been studied by Yoccoz, Arnoux and many others.

No specialised knowledge will be assumed.

There will be a coffee break after the seminar.