

**Department of Mathematics & Statistics** 

## Pure Mathematics Colloquium

# Inhomogeneous attractors: structure and dimension

### Jonathan Fraser (University of Manchester)

#### 6 October 2015 16:00 Room 306 Alan Turing

#### Abstract:

Inhomogeneous iterated function systems are natural generalisations of the classic iterated function systems, commonly used to generate examples of fractal sets. The key difference is, one begins with a fixed "condensation" set which is then dragged into the construction. Such systems have applications in image compression in situations where one wants to produce an image with lots of similar images at different scales, like a flock of seagulls or a forest. I will review some structural properties of these attractors and go on to discuss their dimension theory.

Some of this talk will be joint work with Simon Baker.

Tea and coffee will be available in the common area from 15:30