



## Analysis Seminar

**Title:** Local Iterated Function Systems (IFSs) and Self-Referential Functions

**Speaker:** P. Massopust (TU M"unchen)

**Date:** Tue 31st March 2015 at 3:00PM

**Location:**

**Abstract:** We present the concept of local IFS and highlight some of their properties. As a special but nonetheless very important subclass of local IFSs we consider those whose attractors are graphs of functions. We associate with this subclass of local IFSs a function-valued operator and derive conditions under which this operator maps certain classes of function spaces into themselves. Finally, we introduce fractels (= fractal elements) for both IFSs and functions, and show that fractels give a more intrinsic characterization of self-referentiabiity.