



## Algebra and Number Theory Seminar

**Title:** Small Categories and their Convolutional Algebras over Semirings

**Speaker:** Prof Stefan E. Schmidt (TU Dresden)

**Date:** Mon 7th September 2009 at 4:00PM

**Location:** Mathematical Sciences Seminar Room

**Abstract:** Firstly, we consider directed multi-graphs and their node and edge evaluations into semirings. Thereafter, we specialize to small covariant categories and investigate their convolutional algebras over semirings. Many known semiring constructions turn out to be particular instances of these convolutional algebras. We also show how previous work of G. Voutsadakis and D. Kozlov on Moebius inversion is reflected in our framework.