Title: Homology of Higher Rank Graphs - Part 2

Speaker: Alex Kumjian (University of Nevada)

Time and Dates: 3:30pm, Thursday August 11, 2011

Location: Room 1.G03

Abstract: We introduce a homology and a cohomology theory for higher rank graphs. We will begin by reviewing the definition and basic properties of a $k$-graph $\Lambda$. Our definition of the homology of $\Lambda$ is modeled on Massey’s formulation of the cubical singular homology of a topological space and is equivalent to the homology of a cubical set as defined by Grandis.

If there is time, we will discuss $C^*(\Lambda, \varphi)$, the twisted $k$-graph $C^*$-algebra, where $\varphi$ is a two-cocycle taking values in $\mathbb{T}$.

This talk is based on joint work with David Pask and Aidan Sims.