IMIA Operator Algebra Seminar
University of Wollongong

Title: Homology of Higher Rank Graphs - Part 1

Speaker: Alex Kumjian (University of Nevada)

Time and Dates: 3:30pm, Thursday August 4, 2011

Location: Room 19.1098

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 Λ. Our definition of the homology of Λ 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 φ is a two-cocycle taking values in $\mathbb{T}$.

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