

IMIA Operator Algebra and Noncommutative Geometry Seminar
University of Wollongong

Title: Nonunital spectral triples and metric completeness in unbounded KK-theory

Speakers: Bram Mesland (University of Warwick) and Adam Rennie (UOW)

Time and Date: 3:30pm Thursday 12 and 19 February 2015

Location: Room 39C.meeting room

Abstract: I will talk about the first third of the recent (future?) preprint by Bram Mesland and I. Roughly, I will describe (with lots of examples) how completeness of metric spaces is related to refinements in the notion of approximate unit, and some abstract consequences.

A suitable application of these refined notions of approximate unit results in proofs of self-adjointness of unbounded operators, existence of connections on modules, and the ability to lift Kasparov theory to an explicitly computable setting: most of this is left for Bram next week, but I will indicate how such things might be related.