

IMIA Operator Algebra Seminar
University of Wollongong

Title: Extensions of symmetric unbounded operators

Speaker: Iain Forsyth (University of Wollongong)

Time and Dates: 3:30pm Thursday, 30 May 2013

Location: Room 39C.tearoom

Abstract: For a spectral triple, one requires a self-adjoint unbounded operator. In many cases, there is an obvious choice of domain which defines an operator with a unique self-adjoint extension. However, in other examples this only defines a symmetric operator, and we must then ask whether this operator has self-adjoint extensions. I will explain von Neumann's characterisation of the self-adjoint extensions of a symmetric operator, and if time permits give an example of how the choice of extension can affect the K-homology class of a spectral triple.