

**IMIA Operator Algebra Seminar**  
University of Wollongong

Title: Simple groupoid  $C^*$ -algebras

Speaker: Aidan Sims (University of Wollongong)

Time and Dates: 3:30pm Thursday, 5 April 2012

Location: Room 8.G25

Abstract: It has been known since Renault's thesis in 1980 that if a groupoid is amenable, minimal and topologically principal, then its  $C^*$ -algebra is simple. The converse of this result has been proved recently for some special cases such as groupoids of  $k$ -graphs and transformation groupoids, but it is an open question in general. In this talk I will outline a surprisingly elementary proof that the converse holds for all second-countable étale groupoids and present an example which suggests that the converse fails if  $G$  is not second countable. This is joint work with Jonathan Brown, Lisa Orloff Clark and Cindy Farthing.