

IMIA Operator Algebra Seminar
University of Wollongong

Title: Plancherel Formulas for Coxeter groups and Hecke algebras

Speaker: James Parkinson (University of Sydney)

Time and Dates: 3:30pm Thursday, 10 May 2012

Location: Room 8.G25

Abstract: The decomposition of a trace functional on an algebra into irreducible characters is called a Plancherel Formula. In this talk we wish to (1) expand on the meaning and significance of a Plancherel Formula, (2) sketch some well understood cases (finite dimensional algebras and affine Hecke algebras), and (3) say what we would like to understand outside of these cases. We will focus on algebras of averaging operators acting on the space of functions on the chambers of a building, and illustrate with applications to probability theory on p-adic Lie groups.