Title: Buildings, bounds and the Baum-Connes conjecture

Speaker: Jacqui Ramagge (University of Wollongong)

Time and Date: 3:30pm, Tuesday May 17, 2011

Location: Room 19.1093

Abstract: Proving the Baum-Connes conjecture for certain groups boils down to proving a Haagerup-type bound on functions in the group algebra. I will illustrate the geometric approach to obtaining a Haagerup bound for functions on groups acting on buildings. I will highlight the key innovations in the technique and also its limitations. The limitations are hard. Although this work is now relatively old and the area is of great interest, nobody has managed to improve on the results we obtained in Ramagge, Robertson and Steger in 1998 in terms of the ranks and types of the buildings involved.