

**School of Mathematics and Applied Statistics**  
**2013 Colloquium Series**  
University of Wollongong

**Title:** Classifying Symmetry

**Speaker:** George Willis (University of Newcastle)

**Time and Date:** Friday 6 September 2013, 3:30pm

**Location:** 6-210

**Abstract:** Classifying types of symmetry has been an important theme in mathematics going back to the classification of the five Platonic solids, and continuing into modern times with the classifications of the simple connected Lie groups and of the simple finite groups. The talk will begin by surveying some of the classifications that have been achieved in the past and then continue to discuss a current classification program, that of the simple totally disconnected, locally compact groups. It is only recently that it has seemed feasible to at least a roughly classify these groups, and the talk will describe joint work with Pierre-Emmanuel Caprace and Colin Reid that separates simple groups into types according to their local structure.