

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

**Title:** 3-manifolds, cube complexes and lattices

**Speaker:** Anne Thomas (University of Sydney)

**Time and Date:** Friday 19 April 2013, 3:30pm

**Location:** 24-203

**Abstract:** A recent spectacular result in low-dimensional topology is that every closed 3-manifold has a finite cover which fibres over a circle. This was conjectured by Thurston in the 1970s, and proved by Agol in 2012, using geometric group theory, in particular group actions on cube complexes. I will explain some of the key ideas, and then give some applications to the study of lattices in locally compact groups.