

**AMSI Mahler Lecture Tour 2013**  
hosted by the University of Wollongong

**Title:** Torsion in the homology of arithmetic groups

**Speaker:** Akshay Venkatesh (Stanford University)

**Bio:** Professor Akshay Venkatesh is an Australian mathematical prodigy who completed his undergraduate degree in mathematics with first-class honours at the University of WA at the age of 16. He has made profound contributions in a number of areas of mathematics, including number theory, automorphic forms, representation theory, locally symmetric spaces and ergodic theory. He has won numerous prizes and awards, including the 2008 SASTRA Ramanujan Prize, and is regarded by many as a likely candidate for a Fields medal.

**Time and Date:** 1:30pm Friday 11 October 2013

**Location:** 35.G45

**Abstract:** Take a Bianchi group — eg, invertible  $2 \times 2$  matrices with entries in the Gaussian integers — and abelianize it. The result is often a very large torsion group. This phenomenon will be discussed and how it relates to number theory.