

TEMPLE UNIVERSITY MATHEMATICS COLLOQUIUM

Alan W. Reid

University of Texas at Austin

will speak on

The geometry of canonical curves

ABSTRACT: Suppose that M is a 1-cusped hyperbolic 3-manifold. A component of the $\mathrm{SL}(2, \mathbb{C})$ character variety containing the character of a faithful discrete representation is called a canonical component. Thurston proved that a canonical component is a curve (a canonical curve). This talk will discuss various questions about these canonical curves: for example, which curves arise as canonical curves, what are geometric and algebraic features of canonical curves and how do they relate to M . If time permits we will discuss a possible connection to expander graphs.

MONDAY, APRIL 28, 2013

LECTURE AT 4:00 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3:40 PM

ROOM 617, WACHMAN HALL

DEPARTMENT OF MATHEMATICS