Philadelphia Area Topology (Contact & Hyperbolic)

supported by Bryn Mawr, Haverford, and Temple

Jessica Purcell

Brigham Young University

will speak on

Volumes, guts, and the Jones polynomial

ABSTRACT: Let K be a knot. Then the manifold $S^3 \smallsetminus K$ often (usually, in some sense) admits a unique complete hyperbolic metric. We can use this metric to measure the volume of $S^3 \smallsetminus K$. Additionally associated to K are other invariants, such as the Jones polynomial. A growing body of evidence supports the belief that coefficients of the Jones polynomial are related to the volume of the knot complement. In this talk, we will discuss some of this evidence, as well as our results along these lines. This work is joint with David Futer and Effie Kalfagianni.

Tuesday, 3 November 2009
Lecture at 3:30 pm
Coffee, tea, and refreshments from 3:00–5:00 pm
Room 617, Wachman Building
Department of Mathematics