## Cornell Dynamical Systems Seminar www.math.cornell.edu/~dynsem/

## Matt Bainbridge (Indiana University)

Teichmüller curves in genus three

A Teichmüller curve is an algebraic curve in the moduli space  $M_g$  of genus g Riemann surfaces which is isometrically immersed with respect to the Teichmüller metric on  $M_g$ . These curves are very interesting objects from several points of view, including dynamics, algebraic geometry and number theory. Several years go, the classification of Teichmüller curves in  $M_2$  was completed by McMullen, but little is known in higher genus. In this series of talks, I'll discuss work with Martin Moeller on the problem of classifying Teichmüller curves in  $M_3$ .

Friday, December 3, 2010, 2:15 pm, in 205 Malott Hall