Cornell Dynamical Systems Seminar

www.math.cornell.edu/~dynsem/

Kathryn Lindsey (Cornell University)

Counting minimal components of translation surfaces

A holomorphic 1-form ω on a compact complex curve C defines a flat metric and vector field on the complement of a finite set of points in C. The invariant closed sets of the vertical (geodesic) flow on this surface are either periodic or minimal. Kontsevich and Zorich described the connected components of the moduli space of all such pairs (C, ω) where the genus of C and the list of multiplicities of the zeros of ω are specified. I will present tight upper bounds on the number of minimal components of the vertical flow, with the bound taken over all surfaces in any connected component of this moduli space.

Friday, November 12, 2010, 2:15 pm, in 205 Malott Hall