

Friday, January 29, 2016, 4:10 pm

COLLOQUIUM TALK

Speaker: **Jenya Sapir (UIUC)**

Old Main 2231

Counting non-simple closed curves on surfaces

Abstract:

We show how to get coarse bounds on the number of (non-simple) closed geodesics on a surface, given upper bounds on both length and self-intersection number. Recent work by Mirzakhani and others has produced asymptotics for the growth of the number of closed curves with a fixed finite upper bound on self-intersection number, with respect to length. However, these bounds do not give an explicit dependence on intersection number. In particular, no asymptotics, or even bounds, were previously known when intersection number is allowed to grow with length. Time permitting, we will discuss some applications of this result.

SNACKS IN FACULTY LOUNGE AT 3:30 PM.
EVERYONE WELCOME (EVEN IF YOU ARE UNABLE TO ATTEND THE TALK)
