

Friday, February 9, 2018, 4:10 pm

COLLOQUIUM TALK

Speaker: Claire Merriman (UIUC)

Old Main 2231

Coding geodesic flows and various continued fractions

Abstract:

Continued fractions are frequently studied in number theory, but they can also be described geometrically. I will give both pictorial and algebraic descriptions of the flows that describe continued fraction expansions.

This talk will focus on continued fractions of the form $a_1 \pm \frac{1}{a_2 \pm \frac{1}{a_3 \pm \ddots}}$, where the a_i are odd. I will show how to describe these continued fractions as geodesic flows on a modular surface, and compare it to the modular surface needed when a_i are even.

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