Geometry, Groups and Dynamics/GEAR Seminar (held at the Illinois hub of GEAR)

12:00 pm, Tuesday, October 10, 2017, 243 Altgeld Hall

Alex Wright (Stanford)

Dynamics, geometry, and the moduli space of Riemann surfaces

The moduli space of Riemann surfaces of fixed genus is one of the hubs of modern mathematics and physics. We will tell the story of how simple sounding problems about polygons, some of which arose as toy models in physics, became intertwined with problems about the geometry of moduli space, and how the study of these problems in Teichmuller dynamics lead to connections with homogeneous spaces, algebraic geometry, dynamics, and other areas. The talk will mention joint works with Alex Eskin, Simion Filip, Curtis McMullen, Maryam Mirzakhani, and Ronen Mukamel. <u>Video</u>