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

12:00 pm, Thursday, January 24, 2019, 243 Altgeld Hall Joshua Pankau (University of Iowa)
Stretch Factors Coming From Thurston's Construction

Abstract: Associated to every pseudo-Anosov map is a real number called its stretch factor. Thurston proved that stretch factors are algebraic units, but it is unknown exactly which algebraic units are stretch factors. In this talk I will discuss a construction of pseudo-Anosov maps due to Thurston, and discuss my recent results where I classified (up to power) the stretch factors coming from this construction. We will primarily focus on a specific class of algebraic units known as Salem numbers. This talk is intended to be accessible to everyone.