# Topology, Arithmetic, & Dynamics Seminar

## Tameness of Margulis Spacetimes

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A complete affine manifold is a quotient of Euclidean space by a discrete group of affine transformations acting properly. A Margulis spacetime is a 3-dimensional complete affine 3-manifold with free fundamental group of rank at least 2. Not all quotient manifolds of Euclidean 3-space by free groups are solid handlebodies, however. The purpose of this talk is to discuss this question, and an approach to it using the dynamical properties of the geodesic flow on hyperbolic surfaces. This is joint work with Suhyoung Choi. I will also discuss an independent alternative approach this question developed by Jeff Danciger, Franois Guéritaud and Fanny Kassel, which uses Lorentzian geometry.

Date: **Wednesday, November 19, 2014**
Time: 4:00 pm
Place: Fishbowl (4th floor of Exploratory Hall)

For now, the seminar is BYOC$^2$. For special accommodations, please contact Sean Lawton via email at `slawton3@gmu.edu`.