Topology, Arithmetic, & Dynamics Seminar

Quotient of surface groups and homology of finite covers via Topological Quantum Field Theories.

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I will show how we can produce interesting representations of surface groups from the Witten-Reshetikhin-Turaev TQFT. The key fact is the following : these "quantum representations" of surface groups have infinite images but every simple loop acts with finite order. Using this key fact and integral TQFT, we will build regular finite covers of surfaces where the integral homology is not generated by pullbacks of simple closed curves on the base. This is joint work with Thomas Koberda.

Date: **Friday, April 7, 2017**
Time: **2:30-3:20 pm**
Place: **4106 Exploratory Hall**

For special accommodations, please contact Sean Lawton via email at `slawton3@gmu.edu`.