# Slippery Rock University
## Department of Mathematics and Statistics

*Presents*

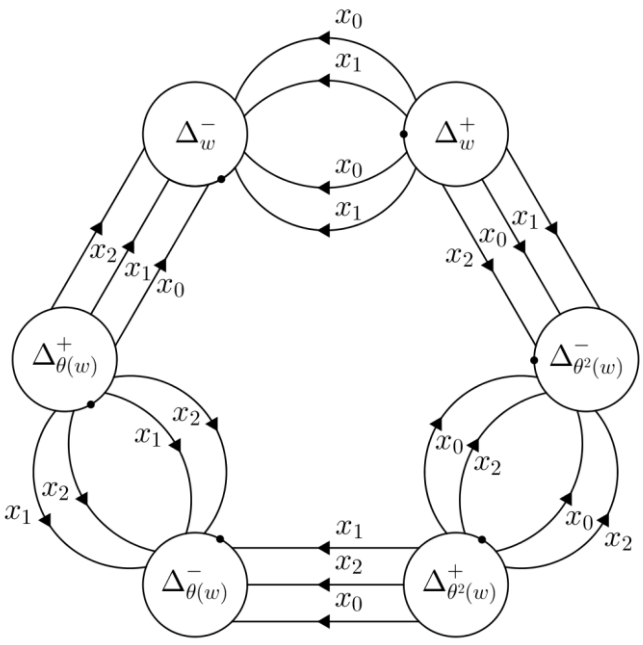
# Kirk McDermott, PhD

## "On cyclically presented groups and 3-manifold topology"

### *Abstract*

A group is said to be cyclically presented if it admits a presentation with a certain cyclic symmetry, and a 3-manifold is a space that locally looks like Euclidean 3-dimentional space. The two are naturally related via the fundamental group, where first examples include the Fibonacci and Sieradski groups (and manifolds). In this talk, we will discuss ways to construct a 3-manifold beginning with a group presentation.

We will go on to demonstrate the process with a large class of cyclic presentations, the so-called groups of type Z. The image on the right provides a blueprint for such a 3-manifold, can you see it?




**Thursday, February 6th**
**VSC 205**
**12:30 p.m.**
**Students are welcome!**