## **Topology** Seminar

## Kate Ponto

of University of Kentucky will be speaking on

## Fixed points and traces

on November 1 at 4:30 in MIT Room 2-131

The Lefschetz fixed point theorem gives a sufficient condition for a continuous endomorphism to have a fixed point: If the Lefschetz number of a continuous endomorphism of a closed smooth manifold is nonzero, that endomorphism has a fixed point. Usually no conclusions can be drawn if the Lefschetz number is zero, but with some (restrictive) hypotheses, there is a converse. I will describe an approach to the converse of the Lefschetz fixed point theorem using traces that also gives converses to the equivariant and fiverwise Lefschetz fixed point theorems.