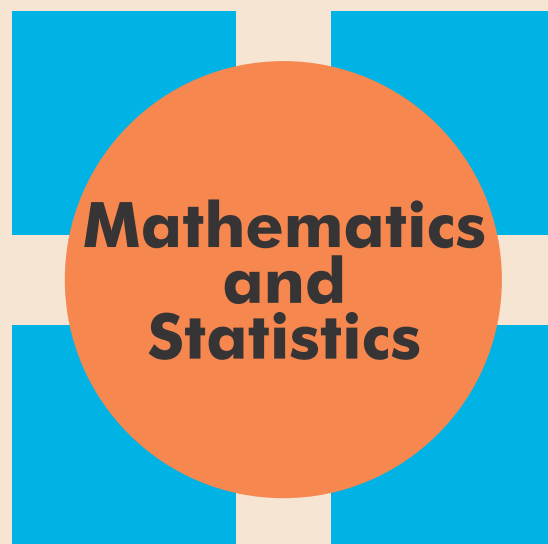


# TOPOLOGY AND GEOMETRY SEMINAR

Catherine Ray  
Universität Münster

## Inverse Galois Theory as Thor's Hammer



Date: Wednesday October 4, 2023

Time: 2:00 PM

Zoom link:

<https://uregina-ca.zoom.us/j/97896109097?pwd=Rkl2UkZsMIYyZTBzejhEY1R4RCt4Zz09>

**Abstract:** The action of the automorphisms of a formal group on its deformation space is crucial to understanding periodic families in the homotopy groups of spheres and the unsolved Hecke orbit conjecture for unitary Shimura varieties. We can explicitly pin down this squirming action by geometrically modelling it as coming from an action on a moduli space, which we construct using inverse Galois theory and some representation theory (a Hurwitz space). I will show you pretty pictures.