



# TOPOLOGY SEMINAR

## Group actions on homology 3-spheres

By

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**Abstract:** I will discuss finite group actions on integral or rational homology 3-spheres. The main examples for this talk are the Brieskorn integral homology 3-spheres  $M(p,q,r)$  arising from isolated singularities, which bound smooth 4-manifolds with definite intersection forms. In addition, there are special infinite families of Brieskorn homology 3-spheres which can be realized as boundaries of smooth contractible 4-manifolds. We ask whether the periodic actions on Brieskorn spheres extend to smooth actions with isolated fixed points on one of these associated 4-manifolds. This is joint work with Nima Anvari.

**Date:** October 21, 2019 Monday

**Time:** 13:40 – 14:40

**Place:** SA141 Mathematics Seminar Room

\* Tea and cookies will be served after the talk. All are most cordially invited.