

## SEMINAR: TOPICS IN GEOMETRIC GROUP THEORY

This is a seminar course aimed at Masters students with some background in group theory and geometry. This would be well suited for students who took the sequence on “Geometric Group Theory” in 2021-22. However the topics are very broad and would be interesting to students who have not taken the Geometric group theory sequence but have adequate knowledge of basic concepts in topology, algebraic topology, group theory, and geometry.

### INSTRUCTOR

Dr. Bakul Sathaye

### PREREQUISITES

Group theory, General topology, Metric spaces, Fundamental groups, Simplicial and CW complexes

### COURSE STRUCTURE

The course will be run as a seminar course, where the participants will present different topics from the course material. We will follow the book “Office hours with a Geometric Group Theorist” by Matt Clay and Dan Margalit. Depending on the number of participants, their backgrounds, and their interests, the participants will have a chance to choose a topic from the book to give a seminar talk on. In order to assist preparation of your presentations and better understanding of the material, we will work in pairs.