



Math 595: Geometric topology

Spring 2016

TUESDAY and THURSDAY 2:00–3:20

Instructor: Chris Leininger

Description: We will start with some basics of hyperbolic geometry and Kleinian groups and then discuss convex cocompactness in that setting. After that, we will switch gears a little bit and I will talk about Teichmüller space, the complex of curves, mapping class groups, and convex cocompactness for subgroups of the mapping class group. We will let interests and time dictate additional topics. There is no required text, but I will make suggestions of books and papers throughout the semester.

Preferred prerequisites are Math 518, 525, and 542. A familiarity with hyperbolic geometry (at least in dimension 2) would be helpful.

Grades are based on class participation, possibly including presenting problems or proofs from time to time.