



Title: Gromov Hyperbolic Metric Spaces

Schedule: Second Semester



Abstract

The goal of the course is to provide an introduction to the theory of Gromov hyperbolic metric spaces. In the first part, we will discuss the general theory: Hopf-Rinow Theorem for length spaces, Gromov hyperbolicity, geodesic stability, Gromov compactification, visibility, and the Bonk-Schramm filling theorem. In the second part, we will study the (forward and backward) dynamics of 1-Lipschitz self-maps of a Gromov hyperbolic space.