## Fall 2025

## Geometry and Topology Seminar

Title

The Tits alternative for visibility spaces

Speaker: Ran Ji, Capital Normal University

Date: November 21, 2025

Time: 10:30AM (China Standard Time) Tencent Meeting (VooV): 382 868 2051, Password: 202511

**Abstract:** We investigate the interplay between the geometry of a proper nonpositively curved space X and the algebraic structure of a group  $\Gamma$  acting properly on X by isometries. We begin by examining the behavior of group actions on hyperbolic spaces  $\mathbb{H}^n$  as a motivating example. We then introduce the necessary tools to extend the classical results to non-uniformly hyperbolic setting, including visibility spaces. This is a joint work with Yunhui Wu.