

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

Seminar

Symmetric structures in the Bruhat order

Professor Yibo Gao

Peking University

Abstract

The Bruhat order encodes algebraic and topological information of Schubert varieties in the flag manifold and possesses rich combinatorial properties. In this talk, we discuss some interrelated stories regarding the Bruhat order and in particular, regarding the smooth permutations, including self-dual Bruhat intervals, vertex-transitive elements, minimal exponents in the Kazhdan-Lusztig polynomials and Billey-Postnikov decompositions. These are joint works with Christian Gaetz.

Date: April 15, 2025 (Tuesday)

Time: 2:30 – 3:30pm

Venue: Room 210, Run Run Shaw Building, HKU

All are welcome