

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

Seminar

Towards a global canonical basis

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Abstract

Beilinson-Drinfeld Grassmannian is a central object in geometric representation theory. The coherence conjecture of Pappas and Rapoport (proved by Zhu) shows that the dimension of global sections is unchanged on BD Grassmannian when passing from the generic fiber to the special fiber. In this talk, we investigate the behavior of canonical bases when passing from the generic fiber to the special fiber. In order to describe this behavior, we propose a definition of global canonical basis, which potentially leads to a new model of total positivity. This is joint with Xuhua He and Jize Yu.

Date: March 19, 2026 (Thursday)

Time: 2:00 pm – 3:00 pm

Venue: Room 210, Run Run Shaw
Building HKU

All are welcome