THE UNIVERSITY   **OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics

GEOMETRY SEMINAR

Total positivity on the twisted product of flag varieties

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Abstract

In this talk, we consider the twisted product of flag varieties, which include as special cases the double flag varieties, the Bott-Samelson varieties, and the Braid varieties. We will explain how to use the (single) flag variety of Kac-Moody groups to study the twisted product of flag varieties of reductive groups. As consequence, we will establish the cellular decomposition and regularity theorem of totally positive structure on the twisted product of flag varieties. In particular, we answer an open problem of Fomin and Zelevinsky on the double Bruhat cells. This talk is based on a joint work with Huanchen Bao (NUS).

Date:	October 13, 2022 (Thursday)
Time:	3:00 – 4:00pm
Venue:	Room 210, Run Run Shaw Bldg., HKU

All are welcome