

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

COLLOQUIUM

The Mathematics of Juggling

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Abstract

Around 1985 three groups of jugglers hit upon the same mathematical system to record and study juggling patterns. I'll explain and demonstrate this system, and its rather simple connection to affine permutations. This system was studied first by combinatorialists, and then by probabilists ("random juggling"), but turns out to be deeply related to the stratification of the Grassmannian by "positroid varieties" (which can be studied from positive real, Poisson, characteristic p , and physics points of view).

Date: August 31, 2026 (Monday)

Time: 2:00 pm – 3:00 pm

Venue: Room 210, Run Run Shaw
Building HKU

All are welcome