



Du
24
NOV.
2022

11h00
-
12h00

SÉMINAIRE PHILIPPE FLAJOLET

Bruhat interval polytopes and their friends

IHP

INSCRIPTION

Given two permutations u and v , with $u \leq v$ in Bruhat order, the Bruhat interval polytope $P_{\{u,v\}}$ is the convex hull of all permutation vectors $(z(1), \dots, z(n))$ with $u \leq z \leq v$. Bruhat interval polytopes include the permutohedron, and are a subset of generalized permutohedra. I'll give an introduction to Bruhat interval polytopes (BIPs) and survey some of their nice properties; for example, each face of a BIP is again a BIP. I'll also explain how these polytopes are connected to tropical geometry and to flag matroids. If time permits, I'll mention some open problems, and indicate how these objects can be generalized to other Lie types and to other partial flag varieties. Based on joint works with Kodama, Tsukerman, and Boretsky-Eur.

URL of the page: <https://www.ihp.fr/fr/agenda/bruhat-interval-polytopes-and-their-friends>



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HORAIRES

L'institut :

- lundi au vendredi de 8h30 à 18h,
- fermé les jours fériés.

Le musée - Maison Poincaré :

- lundi, mardi, jeudi et vendredi de 9h30 à 17h30,
- samedi de 10h à 18h,
- fermé le mercredi et le dimanche.