

Du **02** JUIN. 2021

15h30

-16h30

RÉGA

## Hernán Iriarte - 15:30 - Geometry of Higher Rank Valuations.

INSCRIPTION

It is well known since before Zariski that the set of (equivalent classes) of valuations on the function field of an algebraic curve is in correspondence with the points of the curve. In higher dimensional varieties, this picture gets more complicated: Not every valuation is divisorial, there are valuations of different ranks and the geometry of the space of valuations highly depends on when you consider two valuations to be equal.

Inspired by understanding the relationship between Okounkov bodies and the full rank valuation that defines them, we developed tools to understand geometrically the space of full rank valuations on function fields of algebraic varieties.

The approach will be through the study of valuations of a simple kind called higher rank quasi-monomial valuations. These valuations can be completely expressed in combinatorial terms: They are partial derivative operators on the dual cone complex of a simple normal crossing divisor. These led us to consider tangent cones of dual cone complexes, which will play the role of skeleta in this context. In particular, the space of all higher rank valuations can be obtained as a limit of tangent cones of cone complexes.

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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.

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