

Du
27
NOV.
2021

11h00

-
12h00

SÉMINAIRE BOURBAKI

Sylvy Anscombe — Shelah's Conjecture and Johnson's Theorem

IHP
Hermite

INSCRIPTION

The "Shelah Conjecture" proposes a description of fields whose first-order theories are without the Independence Property (IP): they are finite, separably closed, real closed, or admit a non-trivial henselian valuation. One of the most prominent dividing lines in the contemporary model-theoretic universe, IP holds in a theory if there is a formula that can define arbitrary subsets of arbitrarily large finite sets. In 2020, Johnson gave a proof of the conjecture in an important case; namely, the case of dp-finite (roughly: finite dimensional) theories of fields. Combined with a result of Halevi–Hasson–Jahnke, Johnson's Theorem completely classifies the dp-finite theories of fields.

We will explain this classification, describe some ingredients of the proof, and explore how Johnson's Theorem and the Shelah Conjecture fit into the bigger picture.



INSTITUT HENRI POINCARÉ - UAR839

Sorbonne Université / CNRS
11 rue Pierre et Marie Curie
75231 Paris Cedex 05

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.