



Du
19
JAN.
2019

14h30
-
15h30

SÉMINAIRE BOURBAKI

Stefan KEBEKUS — Boundedness results for singular Fano varieties, and applications to Cremona groups

Institut Henri Poincaré
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INSCRIPTION

A normal, projective variety is called Fano if a negative multiple of its canonical divisor class is Cartier and if the associated line bundle is ample. Fano varieties appear throughout geometry and have been studied intensely. The Minimal Model Programme predicts in an appropriate sense that Fanos are one of the fundamental classes of varieties, out of which all other varieties are built. We report on work of Birkar, who confirmed a long-standing conjecture of Alexeev and Borisov-Borisov, asserting that Fano varieties with mild singularities form a bounded family once their dimension is fixed. This has immediate consequences for our understanding of Cremona groups. Following Prokhorov-Shramov, we explain how Birkar's boundedness result implies that birational automorphism groups of projective spaces satisfy the Jordan property; this answers a question of Serre in the positive.

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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,
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