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Leibniz
Universität
Hannover

Oberseminar

Zahlentheorie und Arithmetische Geometrie

Lukas Braun
(Universität Tübingen)

"Gorensteinness and iteration of Cox rings"

We show that finitely generated class group-graded Cox rings are Gorenstein. This leads to a refined characterization of varieties of Fano type: they are exactly those projective varieties with Gorenstein canonical quasicone Cox ring. We then show that for varieties of Fano type and Kawamata log terminal (klt) quasicones, iteration of Cox rings is finite with factorial master Cox ring. Moreover, we prove a relative version of Cox ring iteration for almost principal solvable G -bundles and deduce finiteness of iteration e.g. for Picard group-graded Cox rings.

Donnerstag, 16.05.2019

ab 12:00 Uhr, a410

Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

**Institut für Algebra, Zahlentheorie
und Diskrete Mathematik**