



Leibniz
Universität
Hannover

Oberseminar
Institut für Algebraische Geometrie

Pieter Belmans
(Universität Bonn)

The quadratic Fano correspondence for cubic
hypersurfaces via derived categories.

The quadratic Fano correspondence for cubic hypersurfaces relates the geometry of the Fano variety of lines of the cubic to the geometry of the Hilbert scheme of 2 points on the cubic. One can study this correspondence in various settings, e.g. on the level of Hodge structures, or in the Grothendieck ring of varieties. By describing semiorthogonal decompositions for standard flips we can describe the correspondence on the level of derived categories. A curious corollary of this is the first construction of so-called Fano visitors which are hyperkähler fourfolds, as it turns out that some Hilbert squares of higher-dimensional Fano varieties are themselves Fano. This is joint work with Lie Fu and Theo Raedschelders.

Freitag, 05.06.2020

16:30 - 17:30

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Alle Interessierten sind herzlich eingeladen.