Oberseminar
Institut für Algebraische Geometrie

Nebojsa Pavic
(Leibniz Universität Hannover)

The diagonal of quartic fivefolds.

We show that a very general quartic fivefold $X \subset \mathbb{P}^6$ over a field of characteristic different from 2 does not admit a decomposition of the diagonal and thus X is not retract rational. This generalizes a result of Nicaise-Ottem, who showed stable irrationality of quartic fivefolds $X \subset \mathbb{P}^6$ over fields of characteristic zero. To achieve this, we introduce a new cycle-theoretic obstruction that may be seen as an analogue of the motivic obstruction for rationality in characteristic zero, introduced by Nicaise-Shinder and Kontsevich-Tschinkel. This is joint work with Stefan Schreieder.

Donnerstag, 22.07.2021
16:30 - 17:30
Leibniz Universität Hannover
Alle Interessierten sind herzlich eingeladen.