



Leibniz
Universität
Hannover

Oberseminar
Institut für Algebraische Geometrie

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The construction problem for Hodge numbers.

The Hodge numbers of smooth projective varieties in a given dimension are constrained by Serre duality, and in characteristic zero additionally by Hodge symmetry. But unexpected further restrictions on the Hodge numbers exist, and a complete classification seems to be unlikely. However, the construction problem for Hodge numbers turns out to be fully solvable from an arithmetic perspective, i.e. when considering the Hodge numbers modulo an arbitrary integer. In particular, we show that any polynomial relation between the Hodge numbers is induced by Serre duality and Hodge symmetry in characteristic zero (joint with Stefan Schreieder), and only by Serre duality in positive characteristic (joint with Remy van Dobben de Bruyn).

Donnerstag, 28.05.2020

16:30 - 17:30

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Alle Interessierten sind herzlich eingeladen.