



Leibniz  
Universität  
Hannover

# Oberseminar für Arithmetische Geometrie und Zahlentheorie

**Tobias Kreutz**

(Humboldt-Universität zu Berlin)

## On the Mumford-Tate conjecture for projective hypersurfaces.

The Mumford-Tate conjecture relates the Hodge structure and the  $\ell$ -adic Galois representation on the cohomology of a smooth projective variety. Many partial results are known for abelian varieties, or varieties with abelian motive such as hyperkähler varieties. In this talk, I want to discuss some special cases of the conjecture for projective hypersurfaces which are not defined over number fields. Along the way, we will study results on the structure of the  $\ell$ -Galois exceptional locus for general families of varieties.

**Freitag, 17.06.2022**

**10:45 - 11:45, Raum A410**

**Leibniz Universität Hannover**

**Alle Interessierten sind herzlich eingeladen.**