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Leibniz  
Universität  
Hannover

# Oberseminar

## Zahlentheorie und Arithmetische Geometrie

**Arne Smeets**  
(Lille / Leuven)

**"On a monodromy trace formula for varieties over discretely valued fields"**

Let  $R$  be a local ring which is complete for a discrete valuation, with fraction field  $K$  and algebraically closed residue field  $k$ . Let  $X$  be a smooth, proper  $K$ -variety. Nicaise conjectured that the rational volume of  $X$  is equal to the trace of the tame monodromy operator on the  $l$ -adic cohomology of  $X$ , if  $X$  satisfies a cohomological tameness condition. We prove his conjecture for a large class of varieties satisfying this condition: those with logarithmic good reduction.

**Mittwoch, 29.04.2015**  
**ab 16:00 Uhr, Raum a410**  
Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

Institut für Algebra, Zahlentheorie  
und Diskrete Mathematik