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Leibniz  
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Hannover

# Oberseminar

## Zahlentheorie und Arithmetische Geometrie

**Dr. Johannes Hofscheier**

(Otto-von-Guericke-Universität Magdeburg)

### "Lattice simplices of bounded degree"

In this talk we present a "moduli"-approach for the study of lattice simplices of bounded degree  $s$ . More precisely we introduce a topology on the space of lattice simplices of bounded degree and suggest a compactification of it by relating simplices to certain subgroups of the real euclidean space. Using Chabauty-Pontryagin duality we can show that these subgroups form only finitely many maximal families. We present a classification of these maximal families for the bound  $s=2$  and conclude the talk by applying our results to the description of the  $h^*$ -vectors of degree 2 lattice simplices. This is joint work with Akihiro Higashitani.

**Donnerstag, 02.02.2017**

**ab 12:00 Uhr, g117**

Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

Institut für Algebra, Zahlentheorie  
und Diskrete Mathematik