



1 1
1 0 2
1 0 0 4

Leibniz
Universität
Hannover

Oberseminar

Zahlentheorie und Arithmetische Geometrie

Fabian Gundlach
(Princeton University)

"Parametrizing field extensions"

In 1940, Delone and Faddeev showed that number fields of degree 3 are (roughly) in bijection with rational symmetric forms of degree 3 in 2 variables, modulo an action of $GL_2(\mathbb{Q})$. In 1992, Wright and Yukie surprisingly found similar parametrizations for number fields of degree 4 and 5.

These parametrizations have been used by Davenport, Heilbronn and later by Bhargava to study one of the main questions of arithmetic statistics: roughly how many number fields are there of degree n and discriminant at most X , as X goes to infinity?

We explain a new method for finding parametrizations of field and ring extensions with fixed Galois group G .

Donnerstag, 20.12.2018

ab 12:00 Uhr, g117

Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

Institut für Algebra, Zahlentheorie
und Diskrete Mathematik