

Mathematisches Kolloquium

Donnerstag, 17. Oktober 2013
15.15 Uhr
Seminarraum II

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Counting integral points of fixed degree and bounded height

Abstract

The Weil height is a function that measures the arithmetic complexity of an algebraic number. By Northcott's Theorem, sets of algebraic numbers of uniformly bounded degree and height are finite. It is therefore natural to investigate the asymptotic behavior of the cardinality of such sets as the height bound tends to infinity. In this seminar, after introducing the basic notions and giving an overview about past results, we explain a few recent results about algebraic integers of fixed degree over an arbitrary number field.