Kolloquium des Fachbereiches Mathematik

Dienstag, 23. November 2004, 17.15 Uhr, Raum F102

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## Euclidean number fields and Euclidean mimima

If $a$ and $b$ are two integers, with $b \neq 0$, then there exist two integers $q$ and $r$ such that $a = bq + r$, and that $|r| < |b|$. This so-called Euclidean division property plays a fundamental role in the arithmetic of the usual integers. It is natural to try to generalise this to more general rings, for instance rings of integers of algebraic number fields. This idea leads to the notions of Euclidean number fields and Euclidean minima. Both are very classical topics of number theory. The aim of this talk is to survey old and new results concerning this subject, such as new Euclidean number fields and upper bounds for Euclidean minima. In particular, we will survey the history and recent developments concerning a classical conjecture of Minkowski.

Alle Interessierten sind herzlich eingeladen!