

Mathematisches Kolloquium

Donnerstag, 11. April 2013
15.15 Uhr
Seminarraum II

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Elliptic curves, their rank, and applications

Abstract

Elliptic curves have been studied for the past 150 years, and this resulted with the development of a rich and deep theory. Elliptic curves are on the crossroad of arithmetic, algebra, geometry and complex analysis. They are of great value in mathematics, for example their role in the proof of Fermat's last theorem is essential. Their beauty lies in the group structure which their points form.

In the talk we will present concisely some basic facts of the theory of elliptic curves and the problem of their ranks. We will also outline it's important applications to cryptography.