Experimentelle und konstruktive Algebra

Experimental and constructive algebra

Kolloquiumsvortrag

Dienstag, 6. Dezember 2016, 14:00 Uhr, SeMath

Lassina Dembele (MPIM, Bonn):
On the existence of abelian surfaces with everywhere good reduction

A famous result of Fontaine (and Abrashkin) states that there is no abelian variety over the rationals with everywhere good reduction. Fontaine's proof of this result relies on the non-existence of certain finite flat group schemes. His technique has been refined by several people (including Schoof, Brumer and Calegari) to prove non-existence of semi-stable abelian varieties over various fields. But one has to expect that such non-existence results are the exception rather than the norm. Indeed, as the base field varies, we must hope to find more abelian varieties with everywhere good reduction.

In this talk, I will present a method for finding abelian surfaces with everywhere good reduction.

Wir laden alle Interessierten herzlich ein.