

Universität des Saarlandes  
FR 6.1 – Mathematik



## Mathematisches Kolloquium

Mittwoch, den 15.07.2015 spricht um 14.00 Uhr c.t. im Hörsaal III der Fachrichtung Mathematik (Gebäude E25)

**Nathan Jones**  
University of Illinois at Chicago

über das Thema:

**“Images of Galois representations associated to elliptic curves”**

*Abstract:* Given an elliptic curve  $E$  defined over a number field  $K$ , consider the action of  $G$ , the absolute Galois group of  $K$ , on the torsion of  $E$ , which represents  $G$  in the group of finite adelic points of  $GL_2$ . It is of general interest to understand the image of this representation. In this talk I will survey some results on this topic, highlighting the situation for a “typical” elliptic curve. I will also discuss how this typical behavior applies to average results on elliptic curves in parametric families, in connection with various conjectures.

Alle Interessenten sind zum Vortrag herzlich eingeladen.

Tee ab 13.45 im Konferenzraum der Mathematik (Raum 103, Gebäude E24)

**Die Dozenten der Mathematik**