Bernoullis Tafelrunde

Graduate Student Seminar

Thursday, 31 March, 12:15-13:00
Seminarraum 00.003, Spiegelgasse 1

Michalis Neururer

Universität Darmstadt

Modular forms and their applications

Abstract

Modular forms appear in many areas of mathematics. I will give an introduction to this subject and will try to give many examples like theta series and Eisenstein series along with number theoretic applications. For examples we will use modular forms to prove Fermat's theorem on sums of 2 squares and Lagrange's four square theorem. If time permits I will also talk about their connections to elliptic curves.