



Mathematisches Kolloquium

Prof. Dr. Matthias Kreck
Director of
Hausdorff-Research Institute for Mathematics, Bonn

Codes, Arithmetic and 3-manifolds

10. Mai 2011, 18.00 Uhr, Raum D.13.08

(ab 17:30 Uhr gibt es Kaffee/Tee im Besprechungsraum)

I will briefly recall the concept of binary error correcting codes. There is a surprising connection to arithmetic, here meaning by linear unimodular symmetric forms over integers. Then I will explain how 3-manifolds with involution give codes and discuss the questions which codes occur this way. Finally I will explain a new construction of codes which comes from topology.