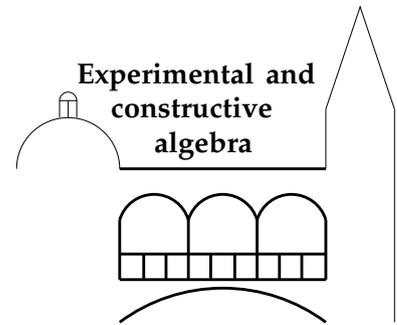


Graduiertenkolleg

Experimentelle und konstruktive Algebra



Kolloquiumsvortrag

Freitag, 27. Oktober 2017, 14:00 Uhr, SeMath

ANNA WERNZ (LEHRSTUHL A FÜR MATHEMATIK):

The Hermitian Modular group and the orthogonal group $O(2, 4)$

The Hermitian modular group of degree n over an imaginary quadratic field $K = \mathbb{Q}(\sqrt{-m})$ was introduced by Hel Braun in the 1940s as an analogue for the well known Siegel modular group. It acts on the Hermitian half space and the associated Hermitian modular forms have been studied thoroughly in the past.

However, this talk does not concentrate on the modular forms but on the modular group itself. For $n = 2$ and $m \neq 1, 3$ we will show that the Hermitian modular group is isomorphic to the discriminant kernel of the orthogonal group $O(2, 4)$. Furthermore, we compute the normalizer of the Hermitian modular group in the symplectic group and show that it is isomorphic to the integral orthogonal group which is the normalizer of the discriminant kernel in the real orthogonal group.

Wir laden alle Interessierten herzlich ein.