Abstracts

Fabien Clery (University of Amsterdam)

Vector-valued Picard modular forms.

I will talk about a joint work with Gerard van der Geer concerning vector-valued Picard modular forms for the unitary group of signature (2,1) over the imaginary quadratic field Q(\sqrt{-3}). First I will recall basic facts about scalar-valued Picard modular forms, and then construct vector-valued Picard modular forms, give some structure theorems and explain how to compute explicitly eigenvalues of these vector-valued Picard modular forms.

Bernhard Heim (German University of Technology, Oman)

Properties of Borcherds lifts.

The main theme of this talk is the characterization of the image of Borcherds lifts. This leads to refinements of known results. Further we introduce a new type of characterization of Borcherds lifts by symmetries and give several applications. [Joint work with Atsushi Murase].

Mladen Dimitrov (University of Lille)

Modular symbols and p-adic L-functions for GL(2) over totally real fields.

Modular symbols are homology classes of cycles on the modular curve arising from geodesics between cusps in the complex upper half plane. In the first part of this talk will introduce a natural generalization of these symbols to the case of Hilbert modular varieties. Then we will use them to construct p-adic L-functions for nearly-ordinary Hilbert modular forms and families of such forms.