

# Explicit theory of automorphic forms, applications and computations

CIRM, Luminy, May 5--13, 2011

Organisateurs : GRITSENKO Valery, KRIEG Aloys,  
SKORUPPA Nils-Peter

## MONDAY 9.05

9h00 Opening of the conference

9h10--10h00 Tomoyoshi Ibukiyama  
Jacobi forms of degree two of index two.

10h25--11h15 Federico Pellarin  
Modular forms and linear difference equations.

11h25--12h15 Kathrin Bringmann  
Taylor coefficients of Mock-Jacobi forms and moments of partition  
statistics.

17h00--17h30 Siegfried Boecherer  
On some explicit arithmetic for the space of Eisenstein series for  
 $\Gamma_0(p)$ .

17h45--18h15 Bernhard Heim  
Symmetries, Borcherds lifts and applications.

18h30--19h00 Olav Richter  
Kohnen's limit process for real-analytic Siegel modular forms.

## TUESDAY 10.05

9h10--10h00 Tamotsu Ikeda  
Kohnen plus subspace for Hilbert modular forms of half-integral weight.

10h25--11h15 Gabi Nebe  
Extremal lattices.

11h25--12h15 Riccardo Salvati Manni  
On Siegel threefolds with a projective Calabi--Yau model.

17h00--17h30 Rainer Schulze-Pillot  
Theta series for the paramodular group.

17h45--18h15 Martin Raum  
Computing with modular forms.

18h30--19h00 Henri Cohen  
A generalization of Haberland's formula for computing Petersson scalar  
products.

## WEDNESDAY 11.05

9h10--10h00 Gerard van der Geer  
Modular forms for genus 3.

10h25--11h15 Cris Poor  
Formal series of Jacobi forms.

11h25--12h15 Nils Scheithauer  
Some constructions of modular forms for the Weil representation.

## THURSDAY 12.05

9h10--10h00 Hironori Shiga  
Explicit Hilbert modular forms via hierarchy of K3 surfaces.

10h25--11h15 Anton Mellit  
Experimental L-functions

11h25--12h15 Hidenori Katsurada  
On the period of the Hermitian Ikeda lift.

16h30--17h20 Alex Ghitza  
Computing Galois representations mod p.

17h30--18h00 Stephan Ehlen  
Twisted traces of CM-values of modular functions. 18h10--18h30 Haigang Zhou Jacobi forms and sums of squares.

18h40--19h00 Andreas Henn  
Even unimodular lattices with a quaternionic structure.

## FRIDAY 13.05

9h10--10h00 Alexei Pantchichkine  
New applications of modular distributions.

10h25--11h15 Gregory K. Sankaran  
Characters of modular groups and topology of modular varieties.

11h25--12h15 Yumiko Hironaka  
Spherical functions and Siegel singular series for p-adic case.

17h00--17h50 Rudolf Scharlau  
Algorithmic classification of integral quadratic forms.

18h00--18h30 Lynne Walling  
Eigenvalues for Siegel Eisenstein series of squarefree level.

18h40--19h10 Ramakrishnan B.  
On the restriction map for Jacobi forms.