

Symposium: Modular Forms, Mock Theta Functions, and Applications

Titles and Schedule of Talks

27 Feb. 2012 – 01 Mar. 2012

Monday, 27 February, 2012

08:45–09:00 – **Greeting**

09:00–10:00 – **Special Krupp Lecture: K. Bringmann (University of Cologne)**
Kac–Wakimoto characters and almost holomorphic modular forms

10:00–10:30 – **Coffee break**

10:30–11:00 – **J. Funke (University of Durham)**
Regularized theta lifts, cycle integrals, and rational period functions

11:15–11:55 – **V. Gritsenko (University of Lille)**
About automorphic relations between affine and Lorentzian Kac–Moody algebras.

11:55–13:25 – **Lunch**

13:25–13:55 – **Z. Kent (Emory University)**
Critical L -values and periods of weakly holomorphic modular forms

14:10–15:10 – **V. Blomer (University of Göttingen)**
Periods and L -functions

15:10–15:40 – **Coffee break**

- 15:40–16:10 – **N. Diamantis (University of Nottingham / MPIM–Bonn)**
Mock period functions
- 16:25–16:55 – **Á. Tóth (Eötvös Loránd University)**
Weak harmonic Maass forms in weight 2
- 17:10–17:40 – **P. Kleban (University of Maine)**
Crossing probabilities, their densities, and modular forms

Tuesday, 28 February, 2012

- 09:00–10:00 – **W. Duke (University of California – Los Angeles)**
Some arithmetic properties of the Fourier coefficients of harmonic modular forms
- 10:00–10:30 – **Coffee break**
- 10:30–11:00 – **A. Folsom (Yale University)**
The asymptotic behavior of Kac-Wakimoto characters
- 11:15–11:55 – **N. Skoruppa (University of Siegen)**
Linear characters of modular groups and associated automorphic forms
- 11:55–13:25 – **Lunch**
- 13:25–13:55 – **M. Raum (MPIM–Bonn)**
Jacobi forms that are harmonic in two directions
- 14:10–15:10 – **D. Zagier (MPIM–Bonn / Collège de France)**
Special mock modular forms
- 15:10–15:40 – **Coffee break**
- 15:40–16:10 – **W. Pribitkin (College of Staten Island, CUNY)**
Some Ruminations on Modular Forms and Their Generalizations
- 16:25–16:55 – **S.-Y. Kang (Kangwon National University)**
Weakly harmonic Maass-Poincare series
- 18:00– – **Conference Dinner**

Wednesday, 29 February, 2012

- 08:30–08:50 – **J. Liang (University of Central Florida)**
Self-conjugate vector partitions and the parity of the *spt*-function
- 09:00–10:00 – **J. Bruinier (University of Darmstadt)**
Regularized theta lifts over totally real fields
- 10:00–10:30 – **Coffee break**
- 10:30–11:00 – **J. Manschot (MPIM–Bonn)**
Appell-Lerch sums from moduli spaces
- 11:15–11:45 – **S. Murthy (Institute for Theoretical Physics / Spinoza Institute)**
Mock modular forms in physics
- 11:45–13:25 – **Lunch**
- 13:25–13:55 – **B. Kane (University of Cologne)**
Locally harmonic Maass forms and rational periods
- 14:10–15:10 – **S. Friedberg (Boston College)**
Eisenstein series on covers of groups
- 15:10–15:40 – **Coffee break**
- 15:40–16:10 – **J. Lovejoy (University of Paris VII)**
Ramanujan's identities for the sixth order mock theta functions
- 16:25–16:55 – **W. Kohnen (University of Heidelberg)**
A characterization of Siegel cusp forms of degree two by the growth of their Fourier Coefficients
- 17:10–17:30 – **M. Waldherr (University of Cologne)**
Asymptotics for moments of higher ranks

Thursday, 1 March, 2012

- 08:20–08:40 – **L. Rolén (Emory University)**
Integrality of Symmetric Functions in Singular Moduli
- 08:50–09:20 – **S. Zwegers (University of Cologne)**
Locally harmonic Maass forms and holomorphic projection
- 09:35–10:05 – **M. Boylan (University of South Carolina)**
The partition function modular prime powers
- 10:05–10:35 – **Coffee break**
- 10:35–11:05 – **K. Mahlburg (Louisiana State University)**
Markov processes and q -series
- 11:20–11:50 – **M. Vlasenko (Trinity College Dublin)**
Linear Mahler Measures and Double L -values of Modular Forms
- 12:05–12:25 – **M. Viazovska (MPIM–Bonn)**
Higher Greens functions and Borcherds lifts
- 12:35–12:55 – **W. Raji (American University of Beirut)**
Generalized Modular Forms and Eichler Cohomology