

# Johannes Kepler Research Center Regensburg

a Workshop of the DFG Research Group 570 „Algebraic Cycles and  $L$ -Functions“ Regensburg/Leipzig

## ARITHMETIC APPLICATIONS OF $p$ -ADIC ANALYSIS AND RIGID SPACES

Regensburg, February 18 to 22, 2008

All lectures take place in room M 104 at the Math building.

Monday, 18.02.2008

- 9.30 - 10.30 Berkovich Vladimir: Affinoid polytopes
- 10.30 - 11.15 *Coffee break (Room: M 103)*
- 11.15 - 12.15 Berger Laurent:  $B$ -pairs and  $(\phi, \Gamma)$ -modules
- 12.15 - 14.30 *Lunch break*
- 14.30 - 15.30 Hartl Urs: Period Spaces for Hodge-Structures in Equal Characteristic
- 15.30 - 16.15 *Coffee break (Room: M 103)*
- 16.15 - 17.15 Thuillier Amaury: Non-Archimedean Potential theory

Tuesday, 19.02.2008

- 9.30 - 10.30 Urban Eric: On  $p$ -adic deformations of Eisenstein series
- 10.30 - 11.15 *Coffee break (Room: M 103)*
- 11.15 - 12.15 Bannai Kenichi:  $p$ -adic elliptic polylogarithm,  $p$ -adic Eisenstein series and Katz measure (joint work with Guido Kings)
- 12.15 - 14.30 *Lunch break*
- 14.30 - 15.30 Orlik Sascha: Equivariant vector bundles on  $p$ -adic period domains
- 15.30 - 16.15 *Coffee break (Room: M 103)*
- 16.15 - 17.15 Poineau Jerome: The Berkovich line over  $Z$

Wednesday, 20.02.2008

- 9.00 - 10.00 Bost Jean-Benoit: Formal, analytic, and rational sections of line bundles over arithmetic surfaces (joint work with A. Chambert-Loir)
- 10.00 - 10.30 *Coffee break (Room: M 103)*
- 10.30 - 11.30 Besser Amnon: On syntomic regulators for  $K_1$  of surfaces
- 11.30 - 12.00 *Coffee break*
- 12.00 - 13.00 Ducros Antoine: Twisted forms of open polydiscs
- 16.00 - 17.00 *Excursion: Altes Rathaus Regensburg*

Thursday, 21.02.2008

- 9.30 - 10.30 Soulé Christophe: A Lefschetz theorem in non archimedean Arakelov geometry
- 10.30 - 11.15 *Coffee break (Room: M 103)*
- 11.15 - 12.15 Werner Annette: Compactifications of buildings and Berkovich spaces
- 12.15 - 14.30 *Lunch break*
- 14.30 - 15.30 Große-Klönne Elmar: On the monodromy operator in log crystalline cohomology
- 15.30 - 16.15 *Coffee break (Room: M 103)*
- 16.15 - 17.15 Tamme Georg: Karoubi's regulator and the  $p$ -adic Borel regulator
- 20.00 *Conference dinner at Leerer Beutel*

Friday, 22.02.2008

- 9.30 - 10.30 Gubler Walter: Equidistribution of small points
- 10.30 - 11.15 *Coffee break (Room: M 103)*
- 11.15 - 12.15 Brinon Olivier: Sen's theory for  $B_{dR}$ -representations in the relative case
- 12.15 - 14.30 *Lunch break*
- 14.30 - 15.30 Tsuji Takeshi: On purity for  $p$ -adic representations

Organizers: Guido Kings (Regensburg), Klaus Künnemann (Regensburg).

(Stand 08.02.2008)