

Johannes Kepler Research Center Regensburg  
DFG Research Group „Algebraic Cycles and L-Functions“

**Final Workshop**

27<sup>th</sup> February – 2<sup>nd</sup> March 2012

Organizers: Annette Huber-Klawitter, Uwe Jannsen, Guido Kings,  
Klaus Künnemann, Alexander Schmidt

All lectures take place in room H 31 at the Math building  
Coffee will be served in room M 103

**Monday, 27.02.2012**

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|---------------|-----------------------------------------------------------------------------------------------------------------------------|
| 8.15 – 9.00   | Registration in room M 103                                                                                                  |
| 9.00 – 10.00  | Gerd Faltings: Rational points and motivic cohomology                                                                       |
| 10.00 – 10.30 | <i>Coffee break</i>                                                                                                         |
| 10.30 – 11.30 | John Coates: Evidence for the non-commutative main conjectures for modular forms of weight strictly bigger than 2           |
| 11.30 – 12.00 | <i>Coffee break</i>                                                                                                         |
| 12.00 – 13.00 | Peter Schneider: Hecke algebras in their natural characteristic are Gorenstein                                              |
| 13.00 – 14.30 | <i>Lunch break</i>                                                                                                          |
| 14.30 – 15.30 | Hélène Esnault: Divisibility of the Chow group of 0-cycles over local valued fields with algebraically closed residue field |
| 15.30 – 16.30 | <i>Coffee break</i>                                                                                                         |
| 16.30 – 17.30 | Peter Jossen: Tate motives and Leopoldt's conjecture                                                                        |

**Tuesday, 28.02.2012**

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|---------------|------------------------------------------------------------------------------------|
| 9.00 – 10.00  | Jürg Kramer: Arithmetic intersections on modular curves                            |
| 10.00 – 10.30 | <i>Coffee break</i>                                                                |
| 10.30 – 11.30 | Antoine Chambert-Loir: Differential forms and currents on Berkovich spaces         |
| 11.30 – 12.00 | <i>Coffee break</i>                                                                |
| 12.00 – 13.00 | José Ignacio Burgos Gil: Arakelov theory of toric varieties, positivity properties |
| 13.00 – 14.30 | <i>Lunch break</i>                                                                 |
| 14.30 – 15.30 | Bruno Kahn: Zeta and L-functions of triangulated motives                           |
| 15.30 – 16.30 | <i>Coffee break</i>                                                                |
| 16.30 – 17.30 | Matthias Wendt: Homology of linear groups over polynomial rings                    |

### **Wednesday, 29.02.2012**

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|---------------|--------------------------------------------------------------------------|
| 9.00 – 10.00  | Ramdorai Sujatha: Derived functors of unramified cohomology              |
| 10.00 – 10.30 | <i>Coffee break</i>                                                      |
| 10.30 – 11.30 | David Harari: The unramified Brauer group of a homogeneous space         |
| 11.30 – 12.00 | <i>Coffee break</i>                                                      |
| 12.00 – 13.00 | Tamás Szamuely: Fundamental groups and Brauer groups of algebraic groups |
|               | <i>Lunch</i>                                                             |
| 15.30 – 17.00 | <i>Excursion</i>                                                         |

### **Thursday, 01.03.2012**

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|---------------|--------------------------------------------------------------------------------------------------------------|
| 9.00 – 10.00  | Claire Voisin: The generalized Hodge and Bloch conjectures are equivalent for general complete intersections |
| 10.00 – 10.30 | <i>Coffee break</i>                                                                                          |
| 10.30 – 11.30 | Gisbert Wüstholz: Periods of Integrals                                                                       |
| 11.30 – 12.00 | <i>Coffee break</i>                                                                                          |
| 12.00 – 13.00 | Atsushi Moriawaki: Birational Arakelov Geometry                                                              |
| 13.00 – 14.30 | <i>Lunch break</i>                                                                                           |
| 14.30 – 15.30 | Kenichi Bannai: On the Eisenstein class for Hilbert-Blumenthal surfaces                                      |
| 15.30 – 16.30 | <i>Coffee break</i>                                                                                          |
| 16.30 – 17.30 | Georg Tamme: Karoubi's p-adic regulator and the syntomic regulator                                           |
| 19.00         | Conference dinner at Leerer Beutel                                                                           |

### **Friday, 02.03.2012**

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|---------------|----------------------------------------------------------------------------------------------|
| 9.00 – 10.00  | Marc Levine: Index and Euler characteristic and cobordism                                    |
| 10.00 – 10.30 | <i>Coffee break</i>                                                                          |
| 10.30 – 11.30 | Thomas Geisser: Duality for $\mathbb{Z}$ -constructible sheaves on curves over finite fields |
| 11.30 – 12.00 | <i>Coffee break</i>                                                                          |
| 12.00 – 13.00 | Shuji Saito: Cohomological Hasse principle and Mc Kay principle                              |

Last updated 17.02.2012