Mini-Workshop on

"Explicit Problems in Diophantine Analysis and Geometry"

organized by Clemens Fuchs

November 29 - 30, 2013

in frame of the ESI-Programme
"Heights in Diophantine geometry, group theory and additive combinatorics"

organized by
Robert Tichy, Jeffrey Vaaler, Martin Widmer, Umberto Zannier

- **Friday, November 29, 2013**

  14:30 – 14:45 Opening
  Welcome words and short presentation of the FWF-project P24574

  14:45 – 15:30 **Rafael von Känel**
  Modularity and integral points on moduli schemes

  15:40 – 16:25 **Lajos Hajdu**
  Explicit solution of exponential diophantine equations using a Hasse-type principle

  16:35 – 17:20 **Roland Paulin**
  The minimal degree of morphisms between curves

  17:30 – 18:15 **Ákos Pintér**
  Variations on a theme: the power values of power sums

- **Saturday, November 30, 2013**

  09:00 – 09:45 **Attila Pethő**
  On a key exchange protocol based on Diophantine equations

  09:55 – 10:40 **Volker Ziegler**
  On the number of primes factors of $\prod_{a,b\in A}(ab+1)$ for small sets A

  10:50 – 11:35 **Mingxi Wang**
  Curves and special points for families of abelian varieties

  11:45 – 12:30 **Andrej Dujella**
  On the existence of rational Diophantine quintuples with the property $D(q)$

All lectures take place in the ESI Boltzmann Lecture Hall