

Birational Geometry and Singularities in Positive Characteristic

Date : November 5 (Tues.) – 9 (Sat.), 2013
Venue : Room 002 at the Mathematical Science Building, University of Tokyo
(you can find information on how to get to the building at
http://www.ms.u-tokyo.ac.jp/access_e/index_e.html)

Program

November 5 (Tues.)

- 10:00 ~ 11:00 Nobuo Hara (Tokyo University of Agriculture and Technology)
Frobenius push-forwards on rational surfaces
- 11:20 ~ 12:20 Hiroyuki Ito (Tokyo University of Science)
Two-dimensional wild quotient singularities in positive characteristic
- 2:00 ~ 3:00 Andre Chatzistamatiou (Universität Duisburg-Essen)
The Frobenius stable part of Witt vector cohomology I
- 3:20 ~ 4:20 Andre Chatzistamatiou (Universität Duisburg-Essen)
The Frobenius stable part of Witt vector cohomology II
- 4:40 ~ 5:40 Kazuma Shimomoto (Meiji University)
Almost purity theorem and big Cohen-Macaulay algebras in
mixed characteristic

November 6 (Wed.)

- 10:00 ~ 11:00 Karl Schwede (Pennsylvania State University)
Global sections produced by the dual of Frobenius I
- 11:20 ~ 12:20 Karl Schwede (Pennsylvania State University)
Global sections produced by the dual of Frobenius II
- 2:00 ~ 3:00 Linquan Ma (University of Michigan)
 F -injectivity and Buchsbaum singularities
- 3:20 ~ 4:20 Akiyoshi Sannai (University of Tokyo)
On dual F -signature
- 4:40 ~ 5:40 Yusuke Nakajima (Nagoya University)
Dual F -signature of Cohen-Macaulay modules over quotient
surface singularities

November 7 (Thur.)

- 10:00 ~ 11:00 Zsolt Patakfalvi (Princeton University)
A birational characterization of ordinary abelian varieties I
- 11:20 ~ 12:20 Zsolt Patakfalvi (Princeton University)
A birational characterization of ordinary abelian varieties II
- 2:00 ~ 3:00 Yifei Chen (Chinese Academy of Sciences)
On subadditivity of Kodaira dimensions in positive characteristic
- 3:20 ~ 4:20 Satoru Fukasawa (Yamagata University)
Galois points for a plane curve in arbitrary characteristic
- 4:40 ~ 5:40 Katsuhisa Furukawa (Waseda University)
On general fibers of Gauss maps in arbitrary characteristic

November 8 (Fri.)

- 10:00 ~ 11:00 Chenyang Xu (Beijing International Center of Mathematics Research)
Three dimensional minimal model program in positive characteristic I
- 11:20 ~ 12:20 Chenyang Xu (Beijing International Center of Mathematics Research)
Three dimensional minimal model program in positive characteristic II
- 2:00 ~ 3:00 Toshiyuki Katsura (Hosei University)
Some invariants of algebraic varieties in positive characteristic
- 3:20 ~ 4:20 Junmyeong Jang (Ulsan University)
Enriques K3 surfaces over odd characteristic
- 4:40 ~ 5:40 Kentaro Mitsui (Kobe University)
On a question of Zariski on Zariski surfaces

November 9 (Sat.)

- 10:00 ~ 11:00 Hiromu Tanaka (Kyoto University)
The trace map of Frobenius and extending sections
- 11:20 ~ 12:20 Paolo Cascini (Imperial College London)
Base point freeness and singularities in the minimal model program
in positive characteristic

The organizers:

Yujiro Kawamata, Yoshinori Gongyo and Shunsuke Takagi (University of Tokyo)