

## MMP and extremal rays

June 20–24, 2011

RIMS, Kyoto University, Room 420

June 20 (Monday)

- 10:00–11:00 J. M<sup>c</sup>Kernan (Massachusetts Institute of Technology),  
*The importance of being big.*
- 11:30–12:30 C. Birkar (Cambridge University),  
*Existence of log canonical flips and a special LMMP.*
- 14:00–15:00 J. A. Chen (National Taiwan University),  
*Explicit three-dimensional minimal model program.*
- 16:00–17:00 M. Mustață (University of Michigan),  
*Asymptotic invariants and valuations.*

June 21 (Tuesday)

- 9:30–10:30 V. V. Shokurov (Johns Hopkins University/Steklov Institute of Mathematics),  
*Mobility and rigidity in birational algebraic geometry.*
- 10:45–11:45 C. Xu (Massachusetts Institute of Technology),  
*Boundedness of algebraic varieties.*
- 13:30–14:30 A. Corti (Imperial College London),  
*Extremal Laurent Polynomials and Fano Manifolds.*
- 14:45–15:45 V. Lazić (Imperial College London),  
*MMP revisited.*
- 16:15–17:15 M. Kawakita (RIMS),  
*Ideal-adic semi-continuity problem for minimal log discrepancies.*

June 22 (Wednesday)

- 10:00–11:00 H. Clemens (Ohio State University),  
*The intersection number for pairs of (topological) normal functions and a height pairing for (disjoint, homologically trivial) submanifolds.*
- 11:30–12:30 Y. Miyaoka (University of Tokyo),  
*Canonical degree of nodal curves on a surface of general type.*
- 14:00–15:00 J. Kollár (Princeton University),  
*MMP and moduli of varieties.*
- 16:00–17:00 S. Mori (RIMS),  
*Threefold  $\mathbb{Q}$ -conic bundles and a personal review of extremal rays.*

June 23 (Thursday)

- 9:30–10:30 V. Alexeev (University of Georgia),  
*Extending Torelli maps.*
- 10:45–11:45 S. Kovács (University of Washington),  
*Deformation of Du Bois singularities.*
- 13:30–14:30 H. Takagi (University of Tokyo),  
*Mirror symmetry and projective geometry of Reye congruence.*
- 14:45–15:45 J.-M. Hwang (Korea Institute for Advanced Study),  
*Varieties of minimal rational tangents of codimension one.*
- 16:15–17:15 Y. Namikawa (Kyoto University),  
*Equivalence of symplectic singularities.*

June 24 (Friday)

- 9:30–10:30 Y. Prokhorov (Moscow State Lomonosov University),  
*On the classification of singular Fano threefolds.*
- 10:45–11:45 M. Reid (University of Warwick),  
*Rings and varieties.*

Organizers: Osamu Fujino, János Kollár, Atsushi Moriawaki, Shigeru Mukai, Noboru Nakayama

## Summer School on Algebraic Geometry

June 13–17, 2011

RIMS, Kyoto University, Room 420

June 13 (Monday)

- 9:30–10:30 P. Cascini (Imperial College London),  
*On the Minimal Model Program, I.*
- 10:45–11:45 P. Hacking (University of Massachusetts Amherst),  
*Moduli spaces of surfaces of general type and their compactifications, I.*
- 14:45–15:30 C.-Y. Chi (Harvard University),  
*Pseudonorms and Theorems of Torelli type.*
- 15:45–16:30 D. Kim (Korea Institute for Advanced Study),  
*Some division problems implied by the openness conjecture for multiplier ideal sheaves.*

June 14 (Tuesday)

- 10:45–11:45 J. Starr (Stony Brook University),  
*Spaces of rational curves on Fano manifolds, I.*
- 13:30–14:30 P. Cascini,  
*On the Minimal Model Program, II.*

- 14:45–15:30 Y. Gongyo (University of Tokyo),  
*Log pluricanonical representations and abundance conjecture.*
- 15:45–16:30 C.-J. Lai (University of Utah),  
*Varieties fibered by good minimal models.*

June 15 (Wednesday)

- 9:30–10:30 P. Hacking,  
*Moduli spaces of surfaces of general type and their compactifications, II.*
- 10:45–11:45 J. Starr,  
*Spaces of rational curves on Fano manifolds, II.*
- 12:00–13:00 M. Păun (Institut Élie Cartan, Université Henri Poincaré),  
*Extension theorems for pluricanonical forms, I.*

June 16 (Thursday)

- 9:30–10:30 P. Cascini,  
*On the Minimal Model Program, III.*
- 10:45–11:45 M. Păun,  
*Extension theorems for pluricanonical forms, II.*
- 13:30–14:30 J. Starr,  
*Spaces of rational curves on Fano manifolds, III.*
- 14:45–15:30 K. Watanabe (University of Tokyo),  
*Lengths of chains of minimal rational curves on Fano manifolds of Picard number 1.*
- 15:45–16:30 A. Ito (University of Tokyo),  
*Seshadri constants and Okounkov bodies.*

June 17 (Friday)

- 9:30–10:30 M. Păun,  
*Extension theorems for pluricanonical forms, III.*
- 10:45–11:45 P. Hacking,  
*Moduli spaces of surfaces of general type and their compactifications, III.*
- 13:30–14:15 S. Matsumura (University of Tokyo),  
*Asymptotic cohomology vanishing and a converse of the Andreotti–Grauert theorem on surfaces.*
- 14:30–15:15 T. Okada (Kyoto University),  
*On the Mori fiber structures of  $\mathbb{Q}$ -Fano 3-fold weighted complete intersections.*

Organizers: Osamu Fujino, Takayuki Hayakawa, Masayuki Kawakita, Noboru Nakayama.