

# Geometry and analysis on complex algebraic varieties

## RIMS 研究集会

京都大学数理解析研究所の共同研究事業の一つとして、平成 18 年度 二国間交流事業 ロシアとの共同研究（日本側代表 斎藤恭司、ロシア側代表 A. Alexsandrov）に関連する研究集会を下記のように催します。なお旅費支給希望者は 斎藤恭司（saito@kurims.kyoto-u.ac.jp, kenkyubu@kurims.kyoto-u.ac.jp）までお問い合わせ下さい。

### 記

日時： 2006 年 12 月 11 日（月）9：30～12 月 15 日（金）17：00

場所： 京都大学数理解析研究所 2 階 202 号室  
京都市左京区北白川追分町  
市バス 農学部前 または 北白川 下車

### プログラム

- 12 月 11 日（月）  
9:30-9:45 Opening  
9:45-10:45 寺尾宏明（北海道大学）  
Basic properties of multiarrangements  
11:00-12:00 I. Dolgachev (University of Michigan)  
Logarithmic sheaves attached to  
arrangements of hyperplanes  
13:30-14:30 吉永正彦 (ICTP, Trieste)  
Characterizations of free arrangements  
14:45-15:45 F-J. Castro-Jiménez (University of Seville)  
Computational Methods for testing the range of validity of the LCT  
16:00-17:00 阿部拓郎（北海道大学）  
Construction of rank two reflexive sheaves from finite fields
- 12 月 12 日（火）  
9:45-10:45 田島慎一（新潟大学）  
On holonomic D-modules attached to a family of non  
quasihomogeneous hypersurface isolated singularities

- 11:00-12:00 T. Sadykov (Krasnoyarsk State University)  
Algebraic functions as solutions of holonomic systems of partial differential equations
- 13:30-14:30 竹内 潔 (筑波大学)  
A generalization of Lefschetz fixed point theorems for constructible sheaves (joint work with Y. Matsui)
- 14:45-15:45 F. Bracci (University of Rome 2)  
Localization of characteristic classes on singular varieties and dynamics of holomorphic diffeomorphisms
- 16:00-17:00 A. Shchuplev (Krasnoyarsk State University)  
A new proof of the Vidras-Yger theorem for the total sum of residues
- 12月13日 (水)
- 9:45-10:45 E. Materov (Krasnoyarsk State University)  
Toric duality for quotient rings
- 11:00-12:00 D. Mond (University of Warwick)  
Linear free divisors
- 12月14日 (木)
- 9:45-10:45 L. Fehér (Eötvös Loránd University)  
The structure of Thom polynomials - Localization (joint work with R. Rimanyi)
- 11:00-12:00 大本 享 (北海道大学)  
Generating functions of orbifold Chern classes: Hilbert schemes
- 13:30-14:30 伊澤 毅 (北海道大学)  
Residues of codimension one singular holomorphic distributions
- 14:45-15:45 関口次郎 (東京農工大学)  
Three dimensional Saito free divisors and deformations of singular curves
- 16:00-17:00 石部 正、齋藤恭司 (数理研)  
On the fundamental groups of complements of free divisors
- 12月15日 (金)

- 9:45-10:45 植田一石 (大阪大学)  
Coamoeba and mirror symmetry
- 11:00-12:00 I. Antipova (Krasnoyarsk State University)  
Mellin transforms and algebraic equations
- 13:30-14:30 M. Kazarian (Steklov Institute of Mathematics)  
TBA
- 14:45-15:45 田邊 晋 (熊本大学)  
Gauss-Manin system associated to the singularity of projection.
- 16:00-17:00 A. Aleksandrov (Institute for Control Sciences, RAS)  
The index of vector fields and logarithmic differential forms
- Workshop “Geometry and analysis on complex algebraic varieties”  
11th - 15th December, 2006  
Room 202, RIMS, Kyoto University

### Program

- December 11 (Monday)
- 9:30–9:45 Opening
- 9:45–10:45 H. Terao (Hokkaido University)  
Basic properties of multiarrangements
- 11:00–12:00 I. Dolgachev (University of Michigan)  
Logarithmic sheaves attached to arrangements of hyperplanes
- 13:30–14:30 M. Yoshinaga (ICTP, Trieste)  
Characterizations of free arrangements
- 14:45–15:45 F-J. Castro-Jiménez (University of Seville)  
Computational Methods for testing the range of validity of the LCT
- 16:00–17:00 T. Abe (Hokkaido University)  
Construction of rank two reflexive sheaves from finite fields
- December 12 (Tuesday)
- 9:45–10:45 S. Tajima (Niigata University)  
On holonomic D-modules attached to a family of non  
quasihomogeneous hypersurface isolated singularities
- 11:00–12:00 T. Sadykov (Krasnoyarsk State University)

- Algebraic functions as solutions of holonomic systems of partial differential equations
- 13:30–14:30 K. Takeuchi (Tsukuba University)  
A generalization of Lefschetz fixed point theorems for constructible sheaves (joint work with Y. Matsui)
- 14:45–15:45 F. Bracci (University of Rome 2)  
Localization of characteristic classes on singular varieties and dynamics of holomorphic diffeomorphisms
- 16:00–17:00 A. Shchuplev (Krasnoyarsk State University)  
A new proof of the Vidras-Yger theorem for the total sum of residues
- December 13 (Wednesday)
- 9:45–10:45 E. Materov (Krasnoyarsk State University)  
Toric duality for quotient rings
- 11:00–12:00 D. Mond (University of Warwick)  
Linear free divisors
- December 14 (Thursday)
- 9:45–10:45 L. Fehér (Eötvös Loránd University)  
The structure of Thom polynomials - Localization (joint work with R. Rimanyi)
- 11:00–12:00 T. Ohmoto (Hokkaido University)  
Generating functions of orbifold Chern classes: Hilbert schemes
- 13:30–14:30 T. Izawa (Hokkaido University)  
Residues of codimension one singular holomorphic distributions
- 14:45–15:45 J. Sekiguchi (Tokyo University of Agriculture and Technology)  
Three dimensional Saito free divisors and deformations of singular curves
- 16:00–17:00 T. Ishibe and K. Saito (RIMS, Kyoto University)  
On the fundamental groups of complements of free divisors
- December 15 (Friday)
- 9:45–10:45 K. Ueda (Osaka University)  
Coamoeba and mirror symmetry

- 11:00–12:00 I. Antipova (Krasnoyarsk State University)  
Mellin transforms and algebraic equations
- 13:30–14:30 M. Kazarian (Steklov Institute of Mathematics)  
TBA
- 14:45–15:45 S. Tanabe (Kumamoto University)  
Gauss-Manin system associated to the singularity of projection
- 16:00–17:00 A. Aleksandrov (Institute for Control Sciences, RAS)  
The index of vector fields and logarithmic differential forms