

# Non-Linear Methods in Complex Geometry

date: November 11–14, 2005

place: West 9 Building, 2nd floor Digital Multi-Purpose Hall,  
Tokyo Institute of Technology, O-okayama, Meguro, Tokyo.

## PROGRAM

### Friday, November 11, 2005

#### 10:55–11:00            Opening Address

11:00–12:00            H. Tsuji                    (Sophia Univ.)  
*Variation of Bergman Kernels and its applications*

13:30–14:30            R. Bielawski            (Edinburgh Univ.)  
*Kähler metrics on complexified symmetric spaces*

15:00–16:00            A. Sergeev            (Steklov Math. Inst., Moscow)  
*Seiberg-Witten equations on the non-commutative Euclidean 4-space*

### Saturday, November 12, 2005

9:30–10:30            K. Sugiyama            (Chiba Univ.)  
*On a geometric non-abelian class field theory and an application to threefolds*

11:00–12:00            O. Sheinman            (Steklov Math. Inst., Moscow)  
*Krichever-Novikov algebras and Knizhnik-Zamolodchikov connection for positive genera*

13:30–14:30            R. Miyaoka            (Kyushu Univ.)  
*Extension of Osserman's theorem on the Gauss map of algebraic minimal surfaces*

15:00–16:00            A.L. Gorodentsev    (ITEP & IUM)  
*TBA*

### Sunday, November 13, 2005

9:30–10:30            M. Tsukamoto            (Kyoto Univ.)  
*Infinite energy Yang-Mills gauge theory*

11:00–12:00            L. Charles            (Paris 6 Univ.)  
*Toeplitz operators and torus action*

13:30–14:30            H. Iritani            (Kyoto Univ.)  
*Convergence of quantum cohomology by quantum Lefschetz*

15:00–16:00            Y. Maeda            (Keio Univ.)  
*Deformation quantizations and gerbes*

### Tuesday, November 14, 2005

9:30–10:30            X.-X. Chen            (Univ. of Wisconsin, Madison)  
*On the lower bound of calabi energy*

11:00–12:00            M. Schlichenmaier    (Univ. of Luxembourg)  
*Asymptotic expansion of the Berezin transform for compact Kähler manifolds*

13:30–14:30            M. Bordemann        (Univ. of Haute Alsace)  
*Quantization of Poisson maps*

The 5th International Conference  
by Graduate School of Mathematics, Nagoya University  
**Geometric Quantization and Related  
Complex Geometry**

date: November 16–19, 2005

place: Noyori Conference Hall, Nagoya University

**PROGRAM**

**Wednesday, November 16, 2005**

**9:25–9:30            Opening Address**

9:30–10:30            X.-X. Chen            (Univ. of Wisconsin, Madison)  
*On the lower bound of calabi energy*

11:00–12:00            W. Zhang            (Nankai Univ.)  
*Two themes in geometric quantization*

13:30–14:30            K. Sugiyama            (Chiba Univ.)  
*On a geometric non-abelian class field theory and an application to threefolds*

15:00–16:00            P. Heinzner            (Bochum Univ.)  
*Semistable points with respect to real forms*

**Thursday, November 17, 2005**

9:30–10:30            T. Moriyama            (Osaka Univ.)  
*Pre-symplectic geometry and the construction of pre-symplectic submanifolds*

11:00–12:00            L. Charles            (Paris 6 Univ.)  
*On the semi-classical naturality of quantization with half-form*

13:30–14:30            R. Kobayashi            (Nagoya Univ.)  
*Toward Nevanlinna/Galois theory of the Gauss map*

15:00–16:00            R. Bielawski            (Edinburgh Univ.)  
*Asymptotic monopole metrics*

**Friday, November 18, 2005**

9:30–10:30            A. Futaki            (Tokyo Inst. of Tech.)  
*Harmonic total Chern forms and stability*

11:00–12:00            C.-L. Wang            (National Central Univ.)  
*Invariance of quantum corrected product under simple ordinary flops*

13:30–14:30            J. Rawnsley            (Warwick Univ.)  
*Natural star products*

15:00–16:00            H. Upmeyer            (Univ. of Marburg)  
*Quantization of Symmetric Spaces, including Super-Symmetry*

**Saturday, November 19, 2005**

9:30–10:30            M. Bordemann            (Univ. of Haute Alsace)  
*Quantization of coisotropic submanifolds*

11:00–12:00            T. Mabuchi            (Osaka Univ.)  
*Stability on polarized algebraic manifolds*