Taniguchi Conference on Mathematics Nara '98

DATE: December 15–20, 1998
PLACE: the Nara Prefectural Cultural Hall, Nara, Japan

PROGRAM:

December 15 (Tuesday)

10:30 – 11:30   **R. E. Borcherds**
       Vertex algebras
11:50 – 12:50   **M. Kontsevich**
       Non-commutative algebraic manifolds
14:30 – 15:30   **K. Fukaya**
       Lagrangian submanifolds and mirror symmetry
18:00 – 20:00   **P.-L. Lions**
       On some mathematical problems in fluid mechanics

December 16 (Wednesday)

10:00 – 11:00   **K. Saito**
       Infinite dimensional Lie algebras and their L-functions arising
       from weight systems
11:30 – 12:30   **M. Kashiwara**
       Micro-localization and contact transforms
14:30 – 15:30   **J. Kollar**
       The topology of real and complex algebraic varieties
16:00 – 17:00   **S. Mochizuki**
       The intrinsic Hodge theory of p-adic hyperbolic curves

December 17 (Thursday)

10:00 – 11:00   **S. Mori**
       Rational curves on algebraic varieties – a survey and problems
11:30 – 12:30   **G. Lusztig**
       Representation theory in characteristic p

December 18 (Friday)

10:00 – 11:00   **M. Furuta**
       Spin structure of 4-dimensional manifolds
11:30 – 12:30   **K. Kato**
       Bloch's conductor formula and p-adic epsilon elements

14:30 – 15:30 **Y.-T. Siu**
Applications of L^2 estimates of $\bar{\partial}$ to algebraic geometry
16:00 – 17:00 **P. G. Malliavin**
Construction of probability measure in infinite dimension

December 19 (Saturday)

10:00 – 11:00 **A. Ocneanu**
Operator algebras, topology and quantum symmetry
11:30 – 12:30 **S. Kusuoka**
Approximation of expectation on diffusion model in
mathematical finance
14:30 – 15:30 **S. J. Bloch**
Algebraic cycles and differential forms
16:00 – 17:00 **H. Arai**
Harmonic analysis for singular elliptic differential operators
and its applications

December 20 (Sunday)

10:00 – 11:00 **Y. Giga**
Very fast diffusion and interface dynamics
11:30 – 12:30 **S. R. S. Varadhan**
Large deviation and hydrodynamic scaling