

## **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