

数理解析研究所講究録883

無限可積分系の  
幾何的側面

京都大学数理解析研究所

1994年8月

## 序文

これは、1993年6月30日から7月2日に行われた研究集会“無限可積分系の幾何的側面”における講演の記録である。同じテーマのワークショップが、この研究集会に引き続いて、7月4日から9日城崎で開催された。研究会の開催に際し、京大数理解析研究所に加えて、重点領域科研費 231 “無限可積分系”，日本学術振興会，数理科学振興財団，British Council からも資金援助を得た。ここに，謝意を表したい。

河野俊丈

**RIMS Conference on  
"GEOMETRIC ASPECTS OF INFINITE ANALYSIS"**

June 30 (Wednesday) - July 2 (Friday)  
Research Institute for Mathematical Sciences, Kyoto University  
Room 420 (4th floor)

Programme

**June 30 (Wednesday)**

9:30 - 10:30 A. Varchenko (Univ. of North Carolina at Chapel Hill)  
Geometry of Hypergeometric Functions

11:00 - 12:00 P. Etingof (Yale University)  
Elliptic  $r$ -matrix systems, affine Lie algebras, and projective representations of the braid group of the torus

13:30 - 14:30 H. Nakajima (Tohoku University) 中島啓 (東北大理)  
Vector bundles on simple singularities and representations of simple Lie algebras

14:45 - 15:45 J. Dupont (Aarhus Universitet)  
Dilogarithm identities in conformal field theory and group homology

16:00 - 17:00 K. Saito (RIMS) 斎藤恭司 (京大数理研)  
Limit elements for discrete groups  
-an attempt toward Teichmüller modular functions-

## July 1 (Thursday)

- 9:30 - 10:30 J. Lepowsky (State University of New Jersey Rutgers)  
Theory of tensor products of modules for vertex operator algebras
- 11:00 - 12:00 M. Wakimoto (Mie University) 脇本実 (三重大教育)  
Representation theory of affine superalgebras and its application
- 13:30 - 14:30 R. Dijkgraaf (Universiteit van Amsterdam)  
Mathematics of 2D QCD String Theory
- 14:45 - 15:45 A. Lossev (Institute of Theoretical and Experimental Physics, Moscow)  
Gravitational descendants constructed from matter fields in topological theories and integrable systems
- 16:00 - 17:00 I. Satake (Osaka University) 佐竹郁夫 (阪大理)  
On the flat structure for the simple elliptic singularity
- 18:00 - banquet (Kyodai Kaikan) 京大会館

## July 2 (Friday)

- 9:30 - 10:30 G. Segal (University of Cambridge)  
Formal aspects of index theory
- 11:00 - 12:00 K. Fukaya (University of Tokyo) 深谷賢治 (東大数理)  
Lagrangian intersection,  $A_\infty$  category, and relative Floer homology
- 13:30 - 14:30 S. Piounikhine (Harvard University)  
Combinatorial expression for universal Vassiliev link invariant
- 14:45 - 15:45 J. Murakami (Osaka University) 村上順 (阪大理)  
An application of the Vassiliev-Kontsevich invariant for multiple zeta functions
- 16:00 - 17:00 J. Morava (The Johns Hopkins University)  
Generalizations of elliptic cohomology

無限可積分系の幾何的側面  
研究集会報告集

1993年6月30日~7月2日

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