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短期共同研究

微分方程式と力学系における  
数論的現象の研究

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## Preface

This issue is the report of the workshop

*Diophantine phenomena in differential equations and dynamical systems*

held at RIMS (Research Institute for Mathematical Sciences) of Kyoto University from September 10, 2003 to September 12, 2003 (3 days) as one of the research projects of RIMS. The main object of this workshop was to discuss the current problems in Diophantine phenomena of differential equations and dynamical systems. We hoped that this workshop would give a chance of a collaboration among those researchers studying Diophantine phenomena in different areas of mathematics.

There were seven 90 minutes lectures, all of which were followed by a sufficiently long discussion time so that every audience could make free discussion with a lecturer as soon as every talk finished. I am very glad and grateful to all lecturers for having given well-prepared talks. Hence the problems in every subject were clear not only to specialists but also to those without special knowledge of every subject. I also would like to appreciate all lecturers for having prepared a nice report of the talk. I hope that the reports in this book will be a good introduction and an explanation of every subject which is not easy to understand for beginners.

Finally, I would like to express my sincere thanks to all who supported this workshop, especially to Research Institute for Mathematical Sciences and its staffs, Prof. T. Kawai (RIMS, Kyoto University), Prof. M. Matsumoto (Hiroshima University) and Prof. M. Yamaguchi (Tokai University).

*Masafumi Yoshino*

Hiroshima, May, 2004  
Masafumi Yoshino

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研究代表者 吉野 正史 (Masafumi Yoshino)

副代表者 山口 勝 (Masaru Yamaguchi)

” Todor Gramchev

目次

1. String Equation and One Dimensional Quasiperiodic Dynamical Systems ----- 1  
東海大・理 山口 勝(Masaru Yamaguchi)
2. COMMUTING SINGULAR VECTOR FIELDS WITH LINEAR PARTS  
HAVING JORDAN BLOCKS ----- 31  
Univ. di Cagliari Todor Gramchev
3. IDEAS AND RESULTS FROM THE THEORY OF  
DIOPHANTINE APPROXIMATION ----- 55  
National Univ. of Ireland, Maynooth Detta Dickinson
4. Nevanlinna theoretical approach to a small divisor problem in complex dynamics ----- 65  
金沢大・理 奥山 裕介(Yūsuke Okuyama)
5. MONODROMIES OF SCHWARZIAN DIFFERENTIAL EQUATIONS  
OF A CERTAIN TYPE ----- 76  
広島大・理学 須川 敏幸(Toshiyuki Sugawa)
6. G-FUNCTIONS, G-OPERATORS, AND DIOPHANTINE APPROXIMATIONS ----- 81  
京大・数理研 永田 誠(Makoto Nagata)
7. MOSER'S QUESTION ON A SIMULTANEOUS APPROXIMATION  
OF A SET OF NUMBERS AND A SIMULTANEOUS NORMAL FORMS  
OF MAPS ----- 92  
広島大・理学 吉野 正史(Masafumi Yoshino)