

2K-5100R

63

数
理
解
析
研
究
所

数理解析研究所講究録 837

数論の学際的研究

禁帯出期間
5. 6. 16 - 6. 24
数研図書室

京都大学数理解析研究所

1993年5月

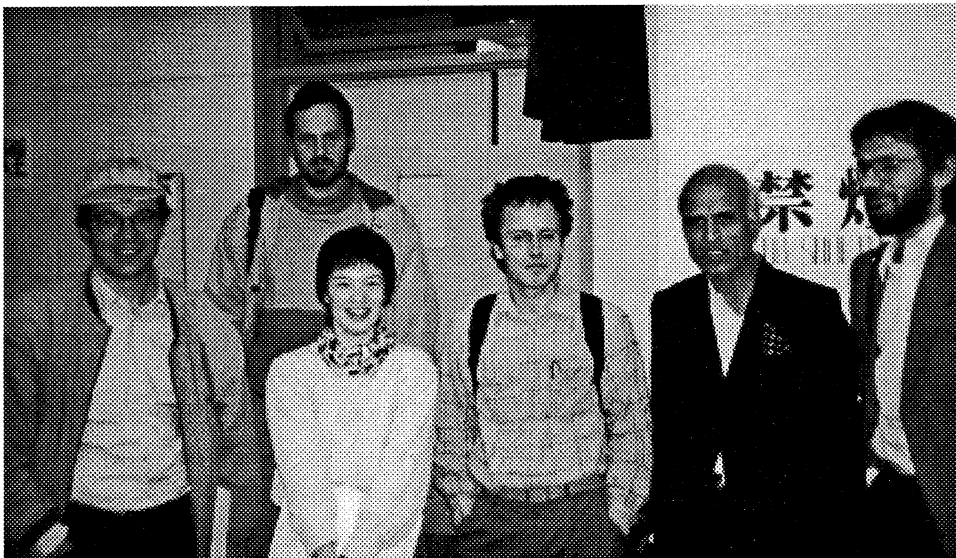
Preface

This is the proceedings of a very successful (at least positive proportion of the participants say so) conference held in RIMS during Nov.10-Nov.14, 1992 under the title "Interdisciplinary studies on number theory", and contains most of the talks except surveys. The topics of the talks were of diversity, reflecting the concept of the conference as well as the interest of Prof. K. Ramachandra whose profound knowledge in three main fields of number theory has enabled to unify most of the topics in an interacting manner. We would like to dedicate this proceedings to him on the occasion of his 60th birthday (whose date coincides with mine). I forgot to ask the contributors for permission of doing so, but I am sure all will agree.

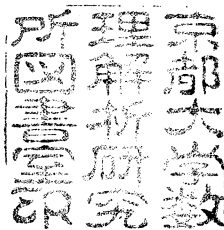
The title suggests those of the possible coming conferences, namely, comprehensive studies, synthetic studies, or fusion of, number theory, and we hope these will be realized in the near future. I was supported in organizing the conference by many of my good friends, both younger and superior (having an inborn amicable character is a good thing), to whom I would like to express my sincere thanks. I would also like to thank the Meigaku seminar group, many of the speakers being active members thereof.

Special thanks are due to Prof. T. Oda for making the conference realizable and Prof. Y. Morita whose general financial support made the stay of Gaijin participants more comfortable. To my great surprise, the majority of more than 80 participants were younger than I, and this rendered me ruminant over the passage: Wedle zas dawnej bramy Kapenskiej wznosi sie dzisiaj malenka kapliczka z zatartym nieco napisem :

"Quo vadis, algebra numerica?"



Gaijin Participants



数論の学際的研究
研究集会報告集

1992年11月10日～11月13日

研究代表者 金光 滋 (Shigeru Kanemitsu)

目 次

1. 楯円関数論から生ずるある種の級数の $\zeta(3)$ への漸近式-----1
新潟大・教養 秋山 茂樹 (Shigeki Akiyama)
2. 3次のGauss和の偏角を近似する初等的な積について-----14
名大・理 伊藤 博 (Hiroshi Ito)
3. On the order of growth of the Kloosterman zeta function-----25
九大・理 吉田 英治 (Eiji Yoshida)
4. Discrepancy inequalities of Erdős-Turán and of LeVeque-----35
鳥取大・教育 後藤 和雄 (Kazuo Goto)
岡山大・理 鹿野 健 (Takeshi Kano)
5. A BRIEF REPORT ON THE ZEROS OF A CLASS OF GENERALISED DIRICHLET
SERIES-----48
Tata Inst. K. Ramachandra
6. On the mean square of the product of the zeta-and L-functions-----57
日大・理工 本橋 洋一 (Yoichi Motohashi)
7. On arithmetical functions whose generating functions are of the
form $\zeta(s)\zeta^{\alpha}(s+1)f(s+1)$ -----63
Tata Inst. U. Balakrishnan
Univ.de Genève Y.-F.S.Pétermann
8. Asymptotic expansions of the mean values of Dirichlet
L-functions IV-----72
鹿児島大・理 桂田 昌紀 (Masanori Katsurada)
9. On the Generalized Divisor Problem-----84
金沢大・理 中屋 秀樹 (Hideki Nakaya)
10. On the representation of numbers as the sum of a prime and a
k-th power-----92
筑波大・数学系 川田 浩一 (Koichi Kawada)

11. Integer Points on Algebraic Curves-----	101
東工大・理	平田 典子(N. Hirata-Kohno)
12. Linear independence results on values related to higher dimensional continued fractions-----	112
国際短大	田村 純一(Jun-ichi Tamura)
13. mod p^2 で p 乗剰余になっている数の分布について-----	122
明治学院大・一般教育	村田 玲音(Leo Murata)
14. On Certain Number Fields with Small Regulators-----	130
都立大・理	中村 憲(Ken Nakamura)
15. On a classification of transcendental numbers by Sprindžuk-----	142
群馬大・教養	天羽 雅昭(Masaaki Amou)
16. 帯領域 $\frac{1}{2} < \sigma < 1$ における Riemann ゼータ関数の二乗平均-----	150
岩手大・教育	松本 耕二(Kohji Matsumoto)
17. Multiple Sine Functions-----	164
東大・数理	黒川 信重(Nobushige Kurokawa)
18. On the Waring Type Problem for Integral Symmetric Matrices-----	178
富山大・教養	江上 繁樹(Shigeki Egami)
19. π と π^2 の無理数度の改良-----	185
京大・総合人間	畑 政義(Masayoshi Hata)