

PROCEEDINGS AT THE 911ST GENERAL MEETING

The 911st General Meeting of the Academy was held on Friday, September 12, 1997, at 1:00 p.m., Dr. Yoshio FUJITA, President, taking the chair. Ninety-seven members were present, and the following communications were made:

- The significance of Sankinkotai-system. Kota KODAMA, M. J. A.
 Japanese Civil Code Eiichi HOSHINO, M. J. A.
 Analysis of surface molecular motion of amorphous polymeric solids on the basis of scanning force microscopy and X-ray photoelectron spectroscopy
 Tisato KAJIYAMA, Keiji TANAKA, and Atsushi TAKAHARA
 Communicated by Seizo OKAMURA, M. J. A.
- Growth of *Mycobacterium leprae* in macrophages *in vitro* Nobutaka OSAWA
 Growth of *Mycobacterium leprae* *in vitro* Nobutaka OSAWA
 Above two, communicated by Kiku NAKAO, M. J. A.
- Multiplicity of the discrete delay time of the response of the solar total irradiance variation to the long-term solar magnetic cycle amplitude modulation deduced from the greenland ^{10}Be data.
 Hirokazu YOSHIMURA
- Decadal components of the solar total irradiance and terrestrial climatic variations as seen in the land air temperature anomaly and Lake Victoria water level changes Hirokazu YOSHIMURA
 Above two, communicated by Yoshio FUJITA, M. J. A.
- The origin of a linear mitochondrial plasmid (mF) that promotes mitochondrial fusion in laboratory strains of *physarum polycephalum* Shigeyuki KAWANO, Takashi ABE, Kimie MORI, and Hiroyoshi TAKANO
 Communicated by Noburô KAMIYA, M. J. A.
- Antitumor effect of indomethacin and telomerase activity in the tumor in Colon 26 bearing CDF₁ mice
 Mitsuharu OGINO, Hisashi HISATOMI, and Makoto HANAZONO
- Three-dimensional structure of microbial 2-hydroxyl-6-oxo-6-phenylhexa-2,4-dienoic acid (HPDA) hydrolase (BphD enzyme) from *Rhodococcus* sp. strain RHA1, in the PCB degradation pathway
 Narayanasamy NANDHAGOPAL,
 Toshiya SENDA, Takashi HATTA, Akihiro YAMADA, Eiji MASAI, Masao FUKUDA, and Yukio MITSUI
- Capture of [^3H]-choline by fibrocytes of frog motor endplate region
 Shigeru TSUJI, Ion MOTELICA-HEINO, and Philippe ANGLADE
 Above three, communicated by Setsuro EBASHI, M. J. A.
- Multifractal spectrum of multinomial meadsues
 Tatsuya OKADA, Takeshi SEKIGUCHI, and Yasunobu SHIOTA
- On the local energy decay of higher derivatives of solutions for the equations of motion of compressible viscous and heat-conductive gases in an exterior domain in \mathbf{R}^3 Takayuki KOBAYASHI
- The generalized whittaker functions for several admissible representations of $Sp(2, \mathbf{R})$
 Takuya MIYAZAKI
- Asymptotic behavior of solutions of certain second order differential equations at infinity.
 Tetsumi YOSHINAGA
- On the zeros of $\sum a_i \exp g_i$ Tuen-Wai NG and Chung-Chun YANG
 Above five, communicated by Kiyosi ITÔ, M. J. A.
- Transcendence of Rogers-Ramanujan continued fraction and reciprocal sums of Fibonacci numbers
 Daniel DUVERNEY, Keiji NISHIOKA, Kumiko NISHIOKA, and Iekata SHIOKAWA
- On hasse principle for $x^n = a$ Takashi ONO and Tomohide TERASOMA
- A remark on naive height of a polarized abelian variety and its applications. Masami FUJIMORI
- A note on the diophantine equation $(m^3 - 3m)^x + (3m^2 - 1)^y = (m^2 +)^z$ Maohua LE
 Above four, communicated by Shokichi IYANAGA, M. J. A.

After a recess during which the members present met in their respective Sections, the General Meeting was resumed for business transactions.

First, the President announced that Dr. Shiro MASUDA, M.J.A., had passed away on June 22, 1997, Dr. Kunihiko KODAIRA, M.J.A., on July 26, 1997, and Dr. Tetsu ISOMURA, M.J.A., on August 23, 1997; the members rose from their seats in silence, expressing profound sense of grief.

Next, the Chairmen of both Sections made reports of the matters dealt with at the respective Sectional Meetings.

Then, a report was made by Dr. Masaaki KUBO, M.J.A., on his mission to the 71st Session of the International Union of Academies held in Jerusalem in June this year.

The Meeting adjourned at 5:00 p.m.

日本学士院紀要

平成九年九月 第七十三卷A 第七号

平成九年十月六日 印刷
平成九年十月九日 発行

編集兼者 日本学士院
東京都台東区上野公園七の三十二
印刷所 株式会社東京プレス
東京都板橋区桜川二丁目二十七の十二
印刷者 依田義一
東京都板橋区桜川二丁目二十七の十二

Printed by
TOKYO PRESS COMPANY LIMITED
No. 27-12, Sakuragawa 2-chome, Itabashi-ku,
Tokyo 174 Japan
Tel.: (3932) 9291~4

PROCEEDINGS OF THE JAPAN ACADEMY

SERIES A MATHEMATICAL SCIENCES

CONTENTS

Papers Communicated:—

	Page
T. OKADA, T. SEKIGUCHI, and Y. SHIOTA: Multifractal Spectrum of Multinomial Measures. . .	123
T. KOBAYASHI: On the Local Energy Decay of Higher Derivatives of Solutions for the Equations of Motion of Compressible Viscous and Heat-conductive Gases in an Exterior Domain in \mathbf{R}^3	126
T. MIYAZAKI: The Generalized Whittaker Functions for Several Admissible Representations of $Sp(2, \mathbf{R})$	130
T. YOSHINAGA: Asymptotic Behavior of Solutions of Certain Second Order Differential Equations at Infinity.	134
T.-W. NG and C.-C. YANG: On the Zeros of $\sum a_i \exp b_i$	137
D. DUVERNEY, Ke. NISHIOKA, Ku. NISHIOKA, and I. SHIOKAWA: Transcendence of Rogers- Ramanujan Continued Fraction and Reciprocal Sums of Fibonacci Numbers	140
T. ONO and T. TERASOMA: On Hasse Principle for $x^n = a$	143
M. FUJIMORI: A Remark on Naive Height of a Polarized Abelian Variety and its Applications . .	145
M. LE: A Note on the Diophantine Equation $(m^3 - 3m)^x + (3m^2 - 1)^y = (m^2 + 1)^z$	148

Proceedings at the 91st General Meeting. XXVII