## **PROCEEDINGS**

## OF THE

# JAPAN ACADEMY

# SERIES A MATHEMATICAL SCIENCES

## **CONTENTS**

Papers	Cam	m	catad	•
Papers	i .om	muni	cateo	· · · · ·

	Page
T. SUZUKI and K. NAGASAKI: Lifting of Local Subdifferentiations and Elliptic Boundary Value Problems on Symmetric Domains, I	1
K. NAGASAKI: Radial Non-positive Solutions for Nonlinear Equation	
$\Delta u +  x ^l  u ^{p-1} u = 0$ on the Ball	5
M. ÔTANI and T. TESHIMA: On the First Eigenvalue of Some Quasi-	
linear Elliptic Equations	8
T. HAMACHI and H. KOSAKI: Index and Flow of Weights of Factors	
of Type III	11
S. JIMBO: Characterization of the Eigenfunctions in the Singularly	
Perturbed Domain. II	14
H. M. SRIVASTAVA, S. OWA, and O. P. AHUJA: A New Class of Analytic	
Functions Associated with the Ruscheweyh Derivatives	17
N. KUROKAWA: Parabolic Components of Zeta Functions	21
M. FURUSHIMA: Complex Analytic Compactifications of $C^3$	25
P. D. Proinoy: On the Erdös-Turán Inequality on Uniform Distribu-	
tion. I	27
Proceedings at the 815th General Meeting	Ι

Published by the Japan Academy Ueno Park, Tokyo

## THE JAPAN ACADEMY

(THE IMPERIAL ACADEMY OF JAPAN TILL DEC., 1947)

PRESIDENT: Toshio KUROKAWA

SECRETARY-GENERAL: Yoshitaro Wakimura

CHAIRMAN OF SECTION I: Yoshitake OKA CHAIRMAN OF SECTION II: Yoshio FUJITA

#### PUBLICATION COMMITTEE

CHAIRMAN: THE SECRETARY-GENERAL

Setsuro Ebashi (Pharmacology and Biophysics) Tsunahiro Kikui (Law of Civil

Procedure)

Yoshio FUJITA (Astronomy) Fumio NAKAJIMA (English Linguistics)

Shinji Fukui (Mechanical Engineering) Takao Tsuchiya (Economic History of Japan)

Nachide HIRATSUKA (Plant Pathology and Mycology) Yuzo YAMADA (Economics)

Kisaburo Yokota (Public International Teiji Ichiko (Japanese Literature) Law) Yasuji Katsuki (Physiology)

Kôsaku Yosida (Mathematics) Masaakira Katsumoto (Civil Law and

Copyright Law)

#### Notes

The papers printed in the Proceedings are generally résumés, while the publication of the full texts is left to the respective authors' choice.

All communications relating to the Proceedings should be addressed to the Secretary-General at the Office of the Academy, Ueno Park, Tokyo, 110.

Those who desire for particular articles may apply for their reprints to the respective authors.

Agents: Maruzen Co. Ltd., 3-10, Nihonbashi 2 Chome, Chuo-ku, Tokyo, 103