HIROSHIMA MATHEMATICAL JOURNAL

Formerly

JOURNAL OF SCIENCE OF THE HIROSHIMA UNIVERSITY, SERIES A-I (MATHEMATICS)

VOLUME 11 1981

PUBLISHED BY

DEPARTMENT OF MATHEMATICS
FACULTY OF SCIENCE
HIROSHIMA UNIVERSITY
HIROSHIMA, JAPAN

TABLE OF CONTENTS

VOLUME 11, 1981

AIKAWA, H.: On the behavior at infinity of non-negative superharmonic functions in a half space 425

ARMITAGE, D. H.: Normal limits, half-spherical means and boundary measures of half-space Poisson integrals 235

ASOH, T.: Compact transformation groups on Z_2-cohomology spheres with orbit of codimension 1 571

BUI HUY QUI: Bernstein's theorem and translation invariant operators ... 81

DOI, H.: A classification of certain symmetric Lie algebras 173

EGUCHI, M. and K. KUMAHARA: Fourier transforms and elementary solutions of invariant differential operators on homogeneous vector bundles over compact homogeneous spaces 143

HIKIDA, M.: On CW cospectra 347

HIRANO, Y.: Regular modules and V-modules 125

HIRANO, Y. and H. TOMINAGA: Some commutativity theorems for rings 457

HITSUDA, M.: See TANAKA, H. 415

HONDA, M.: See TÔGÔ, S. 299

ITANO, M.: On the trace mappings in the space $B_{1,\mu}(R^N)$ 561

KASHIWAGI, Y.: Lie algebras which have an ascending series with simple factors 215

KIJIMA, D. and M. NISHI: Kaplansky's radical and Hilbert Theorem 90 ...443

KIKKAWA, M.: On the decomposition of homogeneous systems with non-degenerate Killing-Ricci tensor 525

KOIKE, T.: On codimension 1 submanifolds in a manifold with abelian fundamental group 317

KUBO, F.: Generally induced modules in Lie algebras 285

KUMAHARA, K.: See EGUCHI, M. 143

KUSANO, T.: On strong oscillation of even order differential equations with advanced arguments 617

MAEDA, M.: Essential self-adjointness of Schrödinger operators with potentials singular along affine subspaces 275

MATSUMOTO, S.: Discrete series for an affine symmetric space 53

MATSUSHIMA, H., K. OKAMOTO and T. SAKURAI: On a certain class of irreducible unitary representations of the infinite dimensional rotation group I 181

MIMURA, M.: Stationary pattern of some density-dependent diffusion system with competitive dynamics 621

MIYAKAWA, T.: On the initial value problem for the Navier-Stokes equations in L^p spaces 9

MIZUTA, Y.: Boundary limits of Green potentials of order α 111

MIZUTA, Y.: Semi-fine limits and semi-fine differentiability of Riesz potentials of functions in L^p 515

NAITO, M.: On strong oscillation of retarded differential equations 553

NARUKAWA, K.: Admissible null controllability and optimal time control 533

NISHI, M.: See KIJIMA, D. 443

NISHII, R.: Balanced fractional $r^m \times s^n$ factorial designs and their analysis ...379

NOZAWA, R.: Programmings with constraints of convex processes 369

OKAMOTO, K.: See MATSUSHIMA, H. 181

OHTSUKA, K.: Generalized J-integral and three dimensional fracture mechanics I 21

PRÜß, J.: A characterization of uniform convexity and applications to accretive operators 229

SAKAMOTO, T.: See TÔGÔ, S. 299

SAKURAI, T.: See MATSUSHIMA, H. 181

SHIMOMURA, K.: Novikov's Ext^2 at the prime 2 499

SHINTANI, H.: On pseudo-Runge-Kutta methods of the third kind 247

STEWART, I.: Subideals and serial subalgebras of Lie algebras 493

STITZINGER, E. L.: Ascendancy in locally solvable, ideally finite Lie algebras 1

TANAKA, H. and M. HITSUDA: Central limit theorem for a simple diffusion model of interacting particles 415

TÔGÔ, S.: Minimal conditions for weak subideals of Lie algebras 5

TÔGÔ, S., M. HONDA and T. SAKAMOTO: Ideally finite Lie algebras ...299

TOMOEDA, T.: Convergence of difference approximations for quasi-linear hyperbolic systems 465

USHIO, K.: Bipartite decomposition of complete multipartite graphs 321

YAGUCHI, H.: Construction of one-dimensional classical dynamical system of infinitely many particles with nearest neighbor interaction 255

YAMADA, H.: Relative invariants of prehomogeneous vector spaces and a realization of certain unitary representations I 97

YOSHIDA, H.: Asymptotic values of meromorphic functions of smooth growth 195

HIROSHIMA MATH. J.
11-3 (Nov. 1981), 457-635

ISSN 0018-2079

CONTENTS

PAGE

Y. HIRANO and H. TOMINAGA: Some commutativity theorems for rings 457

K. TOMOEDA: Convergence of difference approximations for quasi-linear hyperbolic systems 465

I. STEWART: Subideals and serial subalgebras of Lie algebras 493

K. SHIMOMURA: Novikov's Ext^2 at the prime 2 499

Y. MIZUTA: Semi-fine limits and semi-fine differentiability of Riesz potentials of functions in L^p 515

M. KIKKAWA: On the decomposition of homogeneous systems with nondegenerate Killing-Ricci tensor 525

K. NARUKAWA: Admissible null controllability and optimal time control 533

M. NAITO: On strong oscillation of retarded differential equations 553

M. ITANO: On the trace mappings in the space $B_{1,\mu}(R^N)$ 561

T. ASOH: Compact transformation groups on Z_2-cohomology spheres with orbit of codimension 1 571

T. KUSANO: On strong oscillation of even order differential equations with advanced arguments 617

M. MIMURA: Stationary pattern of some density-dependent diffusion system with competitive dynamics 621