

ISSN 0030-6126

OSAKA JOURNAL OF MATHEMATICS

EDITED BY

N. IKEDA H. MORIMOTO
H. NAGAO Y. TSUSHIMA

WITH THE COOPERATION OF

| | | |
|-------------|--------------|-------------|
| S. ARAKI | M. FUKUSHIMA | M. HARADA |
| T. IKEGAMI | K. ISHI | T. MIYATA |
| S. MURAKAMI | M. NAKAOKA | N. NINOMIYA |
| H. OZEKI | K. SHIBATA | M. TAKEUCHI |
| H. TANABE | J. TAO | T. WATANABE |

Volume 21

1984

PUBLISHED JOINTLY BY THE
DEPARTMENTS OF MATHEMATICS
OSAKA UNIVERSITY AND OSAKA CITY UNIVERSITY

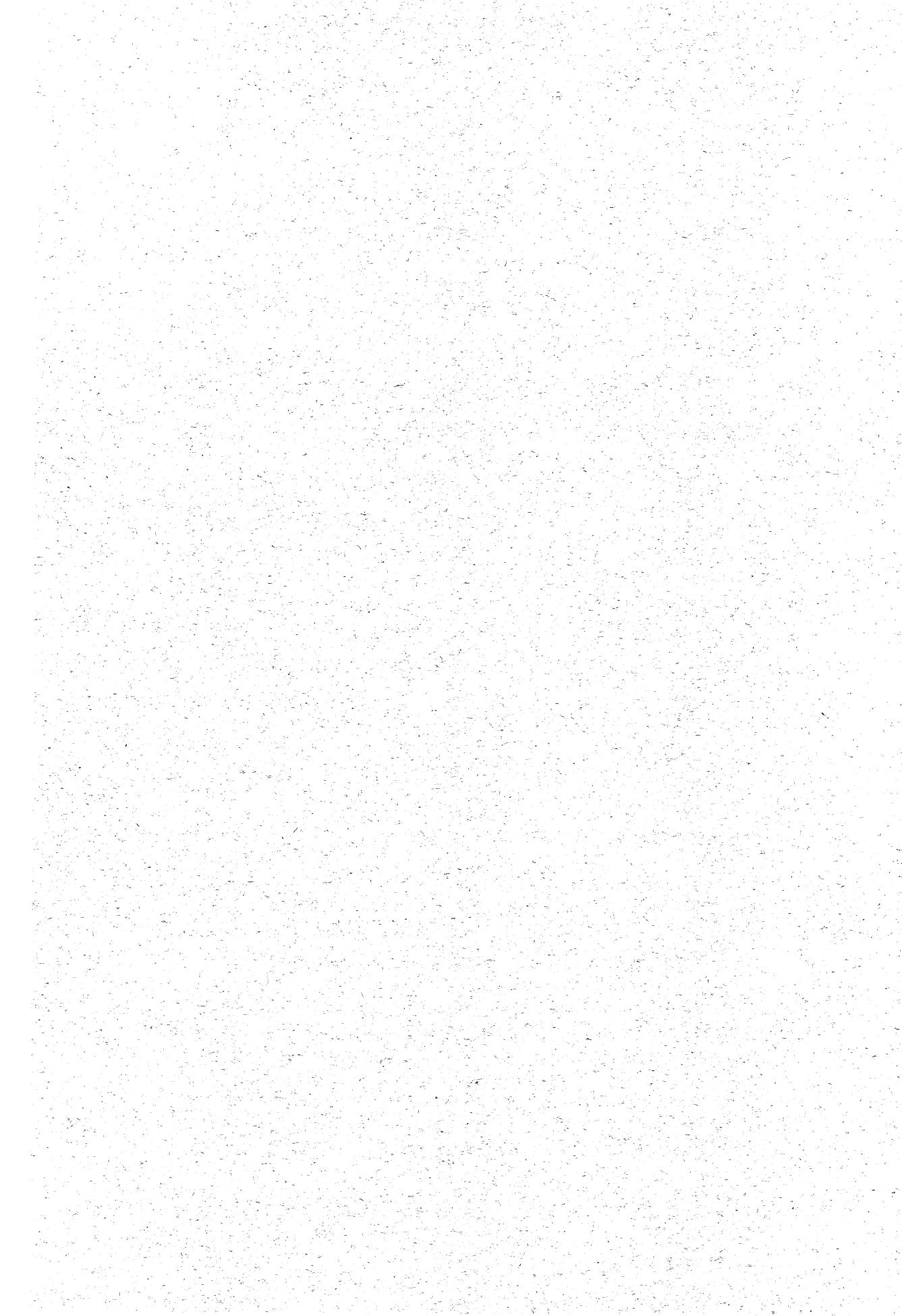
INDEX

- AKASHI, W.Y.: On the perturbation theory for Fredholm operators. 603
 ASASHIBA, H.: On algebras of second local type, I. 327
 _____: On algebras of second local type, II. 343
 BALLY, V.: An approximation theorem for Markov processes. 91
 BERMAN, S.M.: Unboundedness of sample functions of stochastic processes with arbitrary parameter sets, with applications to linear and l_p -valued parameters. 133
 FUKUSHIMA, M. and TAKEDA, M.: A transformation of a symmetric Markov process and the Donsker-Varadhan theory. 311
 HARADA, M.: On maximal submodules of a finite direct sum of hollow modules I. 649
 _____: On maximal submodules of a finite direct sum of hollow modules II. 671
 HONG, Y.: On the nonexistence of unknown perfect 6- and 8- codes in Hamming schemes $H(n, q)$ with q arbitrary. 687
 ICHINOSE, W.: Some remarks on the Cauchy problem for Schrödinger type equations. 565
 IIZUKA, K. and MORIMOTO, M.: Extendibility of G -maps to pseudo-equivalences to finite G -CW-complexes whose fundamental groups are finite. 59
 IKEGAMI, T.: On the boundary behavior of the Dirichlet solutions at an irregular boundary point. 851
 IWASAKI, C.: Construction of the fundamental solution for degenerate parabolic systems and its application to construction of a parametrix of \square_b 931
 KADO, J.: The fixed subrings of a finite group of automorphisms of \aleph_0 -continuous regular rings. 683
 KAPLAN, P. and WILLIAMS, K.S.: On the strict class number of $Q(\sqrt{2p})$ modulo 16, $p \equiv 1 \pmod{8}$ prime. 23
 KAWAUCHI, A.: On the Robertello invariants of proper links. 81
 KOBAYASHI, R.: Kahler-Einstein metric on an open algebraic manifold. 399
 KOBAYASHI, Shi.: A note on regular self-injective rings. 679
 KOBAYASHI, Sho.: The mathematical work of Y. Matsushima and its development. iii
 KOBAYASHI, T.: Structures of the Haken manifolds with Heegaard splittings of genus two. 437
 KOBAYASHI, Y., KOBAYASI, K. and OHARU, S.: Nonlinear evolution operators in Banach spaces. 281

| | |
|--|-----|
| KOBAYASI, K., KOBAYASHI, Y. and OHARU, S.: Nonlinear evolution operators in Banach spaces. | 281 |
| KOMATSU, T.: On the martingale problem for generators of stable processes with perturbations. | 113 |
| ——— and TAKASHIMA, K.: The Hausdorff dimension of quasi-all Brownian paths. | 613 |
| ——— and ———: On the existence of intersectional local time except on zero capacity set. | 913 |
| KUNITA, H.: On the convergence of solutions of stochastic ordinary differential equations as stochastic flows of diffeomorphisms..... | 883 |
| KUTAMI, M.: \aleph_0 -continuous modules. | 31 |
| List of publications of Yozô Matsushima. | xx |
| MASHIMO, K.: Minimal immersions of 3-dimensional sphere into spheres. | 721 |
| MATSUDA, T.: Asymptotic sufficiency I: regular cases. | 239 |
| ———: Asymptotic sufficiency II: truncated cases. | 257 |
| ———: On the rate of convergence for maximum likelihood estimates in a truncated case. | 583 |
| MATUMOTO, T.: On a weakly unknotted 2-sphere in a simply-connected 4-manifold. | 489 |
| MINAMI, H.: A remark on odd-primary components of special unitary groups. | 457 |
| ———: On a K -theory of $SO(n)$ | 789 |
| MOHRI, M.: Quasiconformal metric and its application to quasiregular mappings. | 225 |
| MORIMOTO, M. and IIZUKA, K.: Extendibility of G -maps to pseudo-equivalences to finite G -CW-complexes whose fundamental groups are finite. | 59 |
| MORITA, S.: Nontriviality of the Gelfand-Fuchs characteristic classes for flat S^1 -bundles. | 545 |
| MÜLLER, B.J. and RIZVI, S.T.: Direct sums of indecomposable modules.... | 365 |
| MURAI, M.: A note on the number of irreducible characters in a p -block of a finite group. | 387 |
| MURAKAMI, S.: Yozô Matsushima. | i |
| NAITO, H.: Pseudo-riemannian symmetric R -spaces. | 733 |
| NAKAOKA, M.: Equivariant point theorems for fibre-preserving maps. | 809 |
| NAKAUCHI, N.: On free boundary Plateau problem for general dimensional surfaces. | 831 |
| NEGAMI, S.: The minimum crossing of 3-bridge links. | 477 |
| NISHITANI, T.: A note on reduced forms of effectively hyperbolic operators and energy integrals. | 843 |

| | |
|--|-----|
| NISHIYAMA, M.: Classification of invariant complex structures on irreducible compact simply connected coset spaces. | 39 |
| NOBUSAWA, N.: On a construction of exceptional pseudosymmetric sets. | 701 |
| OHARU, S., KOBAYASI, K. and KOBAYASHI, Y.: Nonlinear evolution operators in Banach spaces. | 281 |
| OJA, K.: On the set of regular boundary points. | 275 |
| OKADO, M. and OSHIRO, K.: Remarks on the lifting property of simple modules. | 375 |
| ŌSHIMA, H.: A homotopy group of the symmetric space $SO(2n)/U(n)$ | 473 |
| ———: A remark on James numbers of Stiefel manifolds. | 765 |
| OSHIRO, K. and OKADO, M.: Remarks on the lifting property of simple modules. | 375 |
| PIZER, A.: Matrices over group rings which are Alexander matrices.... | 461 |
| RIZVI, S.T. and MÜLLER, B.J.: Direct sums of indecomposable modules. | 365 |
| SAITO, K. and WATABE, T.: Semisimple degree of symmetry of manifold with the homotopy type of product $(S^1)^r \times (S^2)^s \times (S^3)^t$ | 493 |
| SAITO, T.: Sharp estimates for the ∂ -Neumann problem and the $\bar{\partial}$ -problem. | 859 |
| SHIGEKAWA, I.: On the quasi everywhere existence of the local time of the 1-dimensional Brownian motion. | 621 |
| SHINYA, K.: On the structure of the augmentation quotients relative to an N_p -series. | 707 |
| SUMIOKA, T.: Tachikawa's theorem on algebras of left colocal type. | 629 |
| SZÜCS, A.: Cobordism groups of immersions with restricted self-intersection. | 71 |
| TAKASHIMA, K. and KOMATSU, T.: The Hausdorff dimension of quasi-all Brownian paths. | 613 |
| ——— and ———: On the existence of intersectional local time except on zero capacity set. | 911 |
| TAKEDA, M. and FUKUSHIMA, M.: A transformation of a symmetric Markov process and the Donsker-Varadhan theory. | 311 |
| TAKEUCHI, M.: Parallel projective manifolds and symmetric bounded domains. | 507 |
| TANIGUCHI, K.: Multi-products of Fourier integral operators and the fundamental solution for a hyperbolic system with involutive characteristics. | 169 |
| UCHIDA, F.: Actions of symplectic groups on a product of a quaternion projective spaces. | 773 |
| WATABE, T. and SAITO, K.: Semisimple degree of symmetry of manifold with the homotopy type of product $(S^1)^r \times (S^2)^s \times (S^3)^t$ | 493 |

| | |
|--|-----|
| WILLIAMS, K.S. and KAPLAN, P.: On the strict class number of $Q(\sqrt{2p})$ modulo 16, $p \equiv 1 \pmod{8}$ prime. | 23 |
| YAMAMOTO, Y.: Divisibility by 16 of class number of quadratic fields whose 2-class groups are cyclic. | 1 |
| YOSIMURA, Z.: Localization of BP-module spectra with respect to BP-related homologies. | 419 |
| ———: Homology localizations after applying some right adjoint functors. | 817 |
| YOTSUTANI, S.: Stefen problems with the unilateral boundary condition on the fixed boundary IV. | 149 |



CONTENTS

| | |
|--|-----|
| NOBUSAWA, N.: On a construction of exceptional pseudosymmetric sets.... | 701 |
| SHINYA, K.: On the structure of the augmentation quotients relative to an N_p -series. | 707 |
| MASHIMO, K.: Minimal immersions of 3-dimensional sphere into spheres. | 721 |
| NAITO, H.: Pseudo-riemannian symmetric R -spaces | 733 |
| OSHIMA, H.: A remark on James numbers of Stiefel manifolds | 765 |
| UCHIDA, F.: Actions of symplectic groups on a product of a quaternion projective spaces. | 773 |
| MINAMI, H.: On the K -theory of $SO(n)$ | 789 |
| NAKAOKA, M.: Equivariant point theorems for fibre-preserving maps. | 809 |
| YOSIMURA, Z.: Homology localizations after applying some right adjoint functors. | 817 |
| NAKAUCHI, N.: On free boundary Plateau problem for general dimen- sional surfaces. | 831 |
| NISHITANI, T.: A note on reduced forms of effectively hyperbolic operators and energy integrals. | 843 |
| IKEGAMI, T.: On the boundary behavior of the Dirichlet solutions at an irregular boundary point. | 851 |
| SAITO, T.: Sharp estimates for the ∂ -Neumann problem and the $\bar{\partial}$ - problem. | 859 |
| KUNITA, H.: On the convergence of solutions of stochastic ordinary differential equations as stochastic flows of diffeomorphisms. | 883 |
| KOMATSU, T. and TAKASHIMA, K.: On the existence of intersectional local time except on zero capacity set. | 913 |
| IWASAKI, C.: Construction of the fundamental solution for degenerate parabolic systems and its application to construction of a parametrix of \square_b | 931 |