



Title	Back pages, Osaka J Math, Volume33, Number 4
Author(s)	
Citation	Osaka Journal of Mathematics. 33(4)
Issue Date	1996-12
Text Version	publisher
URL	<a href="http://hdl.handle.net/11094/20885">http://hdl.handle.net/11094/20885</a>
DOI	
rights	

***Osaka University Knowledge Archive : OUKA***

<https://ir.library.osaka-u.ac.jp/repo/ouka/all/>

# OSAKA JOURNAL OF MATHEMATICS

EDITED BY

M. IKAWA(Chairman) Y. IMAYOSHI M. MASUDA  
M. MIYANISHI T. NISHITANI

WITH THE COOPERATION OF

E. DATE	A. FUJIKI	M. FUKUSHIMA
T. HIBI	T. IBUKIYAMA	T. KAMAE
A. KASUE	Y. KAMETAKA	K. KAWAKUBO
N. KAWANAKA	A. KAWAUCHI	N. KOISO
T. KOMATSU	S. KOTANI	T. MABUCHI
A. MATSUMURA	H. NAGAI	M. NAGASE
M. NAMBA	Y. SAKANE	T. SUZUKI
Y. TSUSHIMA	S. USUI	Y. YAMAMOTO

Vol. 33 1996

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



## INDEX

A'CAMPO, N. and OKA, M.: Geometry of plane curves via Tschirnhausen resolution tower. ....	1003
AKAMATSU, T.: Hypoellipticity of second order operators in $\mathbb{R}^2$ of the form $fX^2 + Y + g$ . ....	607
AUCKLY, D.: The Thurston norm and three-dimensional Seiberg-Witten theory. ....	737
BALLICO, E. and KEEM, C.: Families of smooth $k$ -gonal curves with another fixed pencil. ....	663
BIASI, C. and SAEKI, O.: On bordism invariance of an obstruction to topological embeddings. ....	729
BROWN, G. and YIN, Q.: Metrical theory for Farey continued fractions. ....	951
CHI, Q.-S. and MO, X.: The moduli space of branched superminimal surfaces of a fixed degree, genus and conformal structure in the four-sphere. ....	669
COLOMBINI, F., DEL SANTO, D. and ZUILY, C.: The Fefferman-Phong inequality in the locally temperate Weyl calculus. ....	847
DELANOË, P.: Sur l'analogie presque-complexe de l'équation de Calabi-Yau. ....	829
DEL SANTO, D., ZUILY, C. and COLOMBINI, F.: The Fefferman-Phong inequality in the locally temperate Weyl calculus. ....	847
EBERLE, A.: Girsanov-type transformations of local Dirichlet forms: an analytic approach. ....	497
FERNÁNDEZ, M., LÉON, M. DE and SARALEGUI, M.: A six dimensional compact symplectic solvmanifold without Kähler structures. ....	19
FUJIKI, A.: Closures of orbits of $C$ and $C^*$ actions. ....	365
FUKUSHIMA, H.: On $p$ -radical groups $G$ and the nilpotency indices of $J(kG)$ II. ....	637
GYOJA, A.: Cells and modular representations of Hecke algebras. ....	307
HANAKI, A.: A condition on lengths of conjugacy classes and character degrees. ....	207
HANO, J.-I.: On É. Cartan's spinor theory. ....	1
HIRABA, S.: Infinite Markov particle systems with singular immigration; Martingale problems and limit theorems. ....	145

HIROSE, S.: Periodic automorphisms of surfaces and cobordism. ....	709
HONKASALO, H. and LAITINEN, E.: Equivariant Lefschetz classes in Alexander-Spanier cohomology. ....	793
IIDA, M.: Asymptotic behavior of radial solutions to an elliptic-parabolic system with nonlinear boundary conditions. ....	99
KAMAE, M. and TAKAHASHI, S.: A shape theorem for the spread of epidemics and forest fires in two-dimensional Euclidean space. ....	915
KATO, K. and TANIGUCHI, K.: Gevrey regularizing effect for nonlinear Schrödinger equations. ....	863
KATO, S.: Correctin to "Maximal solutions of the scalar curvature equa- tion on open Riemannian manifolds". ....	587
KAWABATA, T. and TAKEDA, M.: On uniqueness problem for local Dirichlet forms. ....	881
KEEM, C. and BALLICO, E.: Families of smooth $k$ -gonal curves with another fixed pencil. ....	663
KOBAYASHI, O. and UMEHARA, M.: Geometry of scrolls. ....	441
KOISO, N.: On a wave equation corresponding to geodesics. ....	93
KONO, S.: Stable homotopy types of Thom spaces of bundles over orbit manifolds $(S^{2m+1} \times S^l)/D_p$ . ....	411
KOSHITANI, S. and KÜLSHAMMER, B.: A splitting theorem for blocks. ....	343
KÜLSHAMMER, B. and KOSHITANI, S.: A splitting theorem for blocks. ....	343
KUTAMI, M.: On unit-regular rings satisfying $s$ -comparability. ....	983
LAITINEN, E. and HONKASALO, H.: Equivariant Lefschetz classes in Alexander-Spanier cohomology. ....	793
LÉON, M. DE, SARALEGUI, M. and FERNÁNDEZ, M.: A six dimensional compact symplectic solvmanifold without Kähler structures. ....	19
MASAMOTO, K., MATSUHISA, T. and SHIMOMURA, K.: The homotopy groups for a spectrum whose $BP_*$ -homology is $v_2^{-1}BP_*/(2, v_1^\infty)[t_1] \otimes \Lambda(t^2)$ . .....	69
MATSUHISA, T., SHIMOMURA, K. and MASAMOTO, K.: The homotopy groups for a spectrum whose $BP_*$ -homology is $v_2^{-1}BP_*/(2, v_1^\infty)[t_1] \otimes \Lambda(t^2)$ . .....	69
MATSUMOTO, Y.: Handlebody decompositions of 4-manifolds and Torus fibrations. ....	805
MIKI, H.: Non-linearizable real algebraic actions of $0(2, \mathbf{R})$ on $\mathbf{R}^4$ . ....	387
MIYAZAWA, K.: On the $\bar{d}$ -cohomology groups of strongly $q$ -concave manifolds. ....	83
MO, X. and CHI, Q.-S.: The moduli space of branched superminimal surfaces of a fixed degree, genus and conformal structure in the four-sphere. ....	669
NAGATA, M.: On Zariski's problem concerning the 14th problem of Hilbert. ....	997

NAKANO, T. and TAMAI, K.: On some maximal Galois coverings over affine and projective planes. ....	347
NAVARRO, G.: The Alperin argument revisited. ....	971
NISHIMURA, Y.: The $K_*$ -local type of the orbit manifold $(S^{2m+1} \times S^1)/D_q$ by the dihedral group $D_q$ . ....	775
OHNO, K.: Toward determination of the singular fibers of minimal degeneration of surfaces with $k=0$ . ....	235
OHYAMA, Y.: Systems of nonlinear differential equations related to second order linear equations. ....	927
OKA, M. and A'CAMPO, N.: Geometry of plane curves via Tschirnhausen resolution tower. ....	1003
OSHIRO, K. and RIZVI, T.: The exchange property of quasi-continuous modules with the finite exchange property. ....	217
RIZVI, T. and OSHIRO, K.: The exchange property of quasi-continuous modules with the finite exchange property. ....	217
SAEKI, O. and BIASI, C.: On bordism invariance of an obstruction to topological embeddings. ....	729
SARALEGUI, M., FERNANDEZ, M. and LEON, M. DE: A six dimensional compact symplectic solvmanifold without Kähler structures. ....	19
SASAKI, T.: The slice determined by Moduli equation $xy=2z$ in the deformation space of once punctured tori. ....	475
SHIBUYA, T.: Self $\Delta$ -equivalence of ribbon links. ....	751
SHIMOMURA, K., MASAMOTO, K. and MATSUHISA, T.: The homotopy groups for a spectrum whose $BP_*$ -homology is $v_2^{-1}BP_*/(2, v_1^\infty)[t_1] \otimes \Lambda(t^2)$ . ....	69
SHINODA, M.: Percolation on the pre-Sierpinski gasket. ....	533
SORDONI, V.: On the well posedness of the Cauchy problem for a class of hyperbolic operators with multiple involutive characteristics. ....	589
SUETSUGU, Y.: Kontsevich invariant for links in a donut and links of satellite form. ....	823
SUH, D.Y.: Quotients of real algebraic $G$ varieties and algebraic realization problems. ....	399
SUMIOKA, T. and TOZAKI, S.: On almost $QF$ rings. ....	649
TAIRA, K.: On boundary value problems of nonlinear elastostatics. ....	555
TAKAHASHI, S. and KAMAE, M.: A shape theorem for the spread of epidemics and forest fires in two-dimensional Euclidean space. ....	915
TAKEDA, M. and KAWABATA, T.: On uniqueness problem for local Dirichlet forms. ....	881
TAMAI, K. and NAKANO, T.: On some maximal Galois coverings over affine and projective planes. ....	347
TAMURA, M.: The average edge order of triangulations of 3-manifolds .....	761
TANABE, M.: On rigidity of holomorphic maps of Riemann surfaces. ....	485

TANIGUCHI, K. and KATO, K.: Gevrey regularizing effect for nonlinear Schrödinger equations. ....	863
TANIGUCHI, S.: On almost complex structures on abstract Wiener spaces. ....	189
TORISU, I.: Boundary slopes for knots. ....	47
TOZAKI, S. and SUMIOKA, T.: On almost $QF$ rings. ....	649
TSUKADA, K.: Totally geodesic hypersurfaces of naturally reductive homogeneous spaces. ....	697
UMEHARA, M. and KOBAYASHI, O.: Geometry of scrolls. ....	441
WATANABE, A.: Normal subgroups and multiplicities of indecomposable modules. ....	629
XIAO, Y.: Hausdorff measure of the sample paths of Gaussian random fields. ....	895
YAMAGUCHI, A.: The structure of the Hopf algebroid associated with the elliptic homology theory. ....	57
YIN, Q. and BROWN, G.: Metrical theory for Farey continued fractions. ....	951
YOSHIDA, H.: Ideal tetrahedral decompositions of hyperbolic 3-manifolds. ....	37
ZUILY, C., COLOMBINI, F. and DEL SANTO, D.: The Fefferman-Phong inequality in the locally temperate Weyl calculus. ....	847

## Preparation of Manuscripts

The authors are required to prepare the manuscripts in English, French or German and submit them with extra two copies to

Editor in Chief, Osaka Journal of Mathematics,  
Department of Mathematics, Graduate School of Science, Osaka University,  
1-1 Machikaneyama-cho, Toyonaka, Osaka 560, Japan

Manuscripts should be typed and legible. Those prepared on T<sub>E</sub>X should be typeset in 12 point fonts with enough line intervals and margins. The authors are required to observe the following style rules:

1. Abstract or summary should not be attached. The author's address together with his (or her) affiliation is to be written on the last page after the references.
2. In the margin of the first page of the manuscript, write a proposed running head.
3. The references should be quoted by numbers, not by the abbreviations of the names or titles. In the Reference the entries should be written as in the next examples:

[1] H.F. Baker: *On finite groups*, Canad. J. Math. **25** (1973), 35-48.

[2] C.M. Davis: *Group theory*, Springer, Berlin-Heidelberg-NewYork, 1965.

4. Theorem, Proposition, Lemma, Corollary should be written as **Theorem**, **Proposition**, **Lemma**, **Corollary** in the bold face, while Definition, Notation, Remark, Example, Acknowledgement should be written in romans as DEFINITION, NOTATION, REMARK, EXAMPLE, ACKNOWLEDGEMENT with small capitals from the second letter on. Proof is written in romans.
5. Figures should be drawn in black ink and prepared in separate sheets with adequate numbering.

The authors will be required to make the marking of special letters such as boldface, script, German, Greek letters, etc. following the instructions to be mailed after their articles are accepted for publication by the editorial board.



## CONTENTS

MATSUMOTO, Y.: Handlebody decompositions of 4-manifolds and Torus fibrations. ....	805
SUETSUGU, Y.: Kontsevich invariant for links in a donut and links of satellite form. ....	823
DELANOË, P.: Sur l'analogue presque-complexe de l'équation de Calabi-Yau. ....	829
COLOMBINI, F., DEL SANTO, D. and ZUILY, C.: The Fefferman-Phong inequality in the locally temperate Weyl calculus. ....	847
KATO, K. and TANIGUCHI, K.: Gevrey regularizing effect for nonlinear Schrödinger equations. ....	863
KAWABATA, T. and TAKEDA, M.: On uniqueness problem for local Dirichlet forms. ....	881
XIAO, Y.: Hausdorff measure of the sample paths of Gaussian random fields. ....	895
KAMAE, M. and TAKAHASHI, S.: A shape theorem for the spread of epidemics and forest fires in two-dimensional Euclidean space. ....	915
OHYAMA, Y.: Systems of nonlinear differential equations related to second order linear equations. ....	927
BROWN, G. and YIN, Q.: Metrical theory for Farey continued fractions. ....	951
NAVARRO, G.: The Alperin argument revisited. ....	971
KÛTAMI, M.: On unit-regular rings satisfying $s$ -comparability. ....	983
NAGATA, M.: On Zariski's problem concerning the 14th problem of Hilbert. ....	997
A'CAMPO, N. and OKA, M.: Geometry of plane curves via Tschirnhausen resolution tower. ....	1003