

Journal Of Differential Geometry

M. Morse & S. S. Cairns, <i>Singular homology over Z on topological manifolds</i>	257
R. W. Richardson, Jr., <i>Deformations of subalgebras of Lie algebras</i>	289
G. R. Jensen, <i>Homogeneous Einstein spaces of dimension four</i>	309
L. Jonker, <i>A theorem on minimal surfaces</i>	351
S. Tanno & W. C. Weber, <i>Closed conformal vector fields</i>	361
K. Nomizu & B. Smyth, <i>A formula of Simons' type and hypersurfaces of constant mean curvature</i>	367
M. Berger & D. Ebin, <i>Some decompositions of the space of symmetric tensors on a Riemannian manifold</i>	379
N. Grossman, <i>The topology of taut Riemannian manifolds with positive risec pinching</i>	393
V. Ozols, <i>Critical points of the displacement function of an isometry</i>	411
H. Wu, <i>Remarks on the first main theorem in equidistribution theory. IV</i>	433
A. P. Stone, <i>Higher order conservation laws</i>	447
Y. Mutō, <i>Einstein spaces of positive scalar curvature</i>	457
Y. Mutō, <i>Some property of closed hypersurfaces in Riemannian manifolds</i>	461
J. E. D'Atri & H. K. Nickerson, <i>On divergence-preserving geodesic symmetries</i>	467
Y. Matsushima, <i>Hodge manifolds with zero first Chern class</i>	477
H. C. Wang, <i>Discrete nilpotent subgroups of Lie groups</i>	481
D. Gromoll & W. Meyer, <i>Periodic geodesics on compact Riemannian manifolds</i>	493
H. Guggenheimer, <i>Sign changes, extrema and curves of minimal order</i>	511
G. Tsagas, <i>Some properties of negative pinched Riemannian manifolds of dimensions 5 and 7</i>	523

JOURNAL OF DIFFERENTIAL GEOMETRY

Editors

- | | |
|--|--|
| M. F. ATIYAH
Institute for Advanced Study
Princeton, N. J. 08540 | Y. MATSUSHIMA
University of Notre Dame
Notre Dame, Ind. 46556 |
| R. BOTT
Harvard University
Cambridge, Mass. 02138 | A. NIJENHUIS
University of Pennsylvania
Philadelphia, Pa. 19104 |
| E. CALABI
University of Pennsylvania
Philadelphia, Pa. 19104 | L. NIRENBERG
Courant Institute
of Mathematical Sciences
New York University
New York, N. Y. 10012 |
| J. EELLS, JR.
University of Warwick
Coventry, England | R. S. PALAIS
Brandeis University
Waltham, Mass. 02154 |
| F. HIRZEBRUCH
University of Bonn
Bonn, Germany | H. SAMELSON
Stanford University
Stanford, Calif. 94305 |
| C. C. HSIUNG
Lehigh University
Bethlehem, Pa. 18015 | I. M. SINGER
Massachusetts Institute of Technology
Cambridge, Mass. 02139 |
| W. P. A. KLINGENBERG
University of Bonn
Bonn, Germany | S. SMALE
University of California
Berkeley, Calif. 94720 |
| J. J. KOHN
Princeton University
Princeton, N. J. 08540 | S. STERNBERG
Harvard University
Cambridge, Mass. 02138 |
| B. KOSTANT
Massachusetts Institute of Technology
Cambridge, Mass. 02139 | K. YANO
Tokyo Institute of Technology
Tokyo, Japan |

Honorary Editorial Advisors

- | | |
|--|--|
| S. S. CHERN
University of California
Berkeley, Calif. 94720 | A. LICHTNEROWICZ
College of France
Paris, France |
| W. V. D. HODGE
University of Cambridge
Cambridge, England | D. C. SPENCER
Princeton University
Princeton, N. J. 08540 |

The Journal of Differential Geometry is devoted to the publication of research papers in differential geometry and related subjects such as differential equations, mathematical physics, algebraic geometry and geometric topology.

The subscription price for Vols. 35–36 (1992) is \$270.00 list, \$68.00 for personal use of individuals; each volume consists of three numbers. Back number prices per volume (with a 40% reduction for individual members and a 20% reduction for institutional members of the American Mathematical Society): Vols. 1–2 (1967–1968), \$23.00; Vols. 3–6 (1969–1971), \$29.00; Vols. 7–9 (1972–1974), \$39.00; Vol. 10 (1975), \$49.00; Vol. 11 (1976), \$57.00; Vol. 12 (1977), \$65.00; Vols. 13–15 (1978–1980), \$68.00; Vol. 16 (1981), \$79.00; Vol. 17 (1982), \$85.00; Vols. 18–20 (1983–1984), \$130.00; Vols. 21–22 (1985), \$147.00; Vols. 23–28 (1986–1988), \$155.00, Vols. 29–30 (1989), \$172.00, Vols. 31–32 (1990), \$182.00, Vols. 33–34 (1991), \$197.00.

Subscriptions and orders should be addressed to the American Mathematical Society, P.O. Box 1571, Annex Station, Providence, Rhode Island 02901-1571. *All orders must be accompanied by payment, and check should be made payable to the American Mathematical Society.* General correspondence and changes of address should be sent to the American Mathematical Society, P.O. Box 6248, Providence, Rhode Island 02940-6248.


Instructions for submission of manuscripts are given inside of the back cover of this issue.

Journal of Differential Geometry (ISSN 0022-040X) is published bimonthly in January, March, May, July, September and November by Lehigh University, Christmas-Saucon Hall 14, Bethlehem PA 18015-3175. Second Class Postage Rates paid at Bethlehem, PA and an additional mailing office. Postmaster: Send address changes to Journal of Differential Geometry, American Mathematical Society, P.O. Box 6248, Providence, RI 02940.

Copyright © 1969 Lehigh University. All rights reserved.

ISSN 0022-040X

Printed in the United States of America.

The paper used in this issue is acid-free and falls within the guidelines established to ensure permanence and durability. 

10 9 8 7 6 5 4 3 97 96 95 94 93 92 (vol. 3, nos. 3 & 4)

CONTENTS

Alexander, S., <i>Reducibility of Euclidean immersions of low codimension</i>	69
Ambrose, W., <i>Convexity of partial differential operators</i>	125
Amur, K., <i>Vector forms and integral formulas for hypersurfaces in Euclidean space</i>	111
Atiyah, M. F. & Segal, G. B., <i>Equivalent K-theory and completion</i>	1
Berger, M. & Ebin, D., <i>Some decompositions of the space of symmetric tensors on a Riemannian manifold</i>	379
Cairns, S. S., <i>See Morse, M. & Cairns, S. S.</i>	257
D'Atri, J. E. & Nickerson, H. K., <i>On divergence-preserving geodesic symmetries</i>	467
Earle, C. J. & Eells, J., <i>A fibre bundle description of Teichmüller theory</i>	19
Ebin, D., <i>See Berger, M. & Ebin, D.</i>	379
Eells, J., <i>See Earle, C. J. & Eells, J.</i>	19
Fillmore, J. P., <i>Symmetries of surfaces of constant width</i>	103
Gardner, R. B., <i>An integral formula for immersions in Euclidean space</i>	245
Gray, A., <i>Isometric immersions in symmetric spaces</i>	237
Gromoll, D. & Meyer, W., <i>Periodic geodesics on compact Riemannian manifolds</i>	493
Grossman, N., <i>The topology of taut Riemannian manifolds with positive risec pinching</i>	393
Guggenheimer, H., <i>Sign changes, extrema and curves of minimal order</i>	511
Hamilton, R. S., <i>Non-hyperelliptic Riemann surfaces</i>	95
Ishihara, S., <i>See Yano, K. & Ishihara, S.</i>	45
Jensen, G. R., <i>Homogeneous Einstein spaces of dimension four</i>	309
Jonker, L., <i>A theorem on minimal surfaces</i>	351
Matsushima, Y., <i>Hodge manifolds with zero first Chern class</i>	477
Meyer, W. & Gromoll, D., <i>See Gromoll, D. & Meyer, W.</i>	493
Morse, M. & Cairns, S. S., <i>Singular homology over \mathbb{Z} on topological manifolds</i>	257
Mutō, Y., <i>Einstein spaces of positive scalar curvature</i>	457
———, <i>Some property of closed hypersurfaces in Riemannian manifolds</i>	461
Nickerson, H. K., <i>See D'Atri, J. E. & Nickerson, H. K.</i>	467
Nomizu, K. & Smyth, B., <i>A formula for Simons' type and hypersurfaces of constant mean curvature</i>	367
Ochiai, T., <i>Transformation groups on Riemannian symmetric spaces</i>	231
Ogoue, K., <i>Complex hypersurfaces of a complex projective space</i>	253
Ozols, V., <i>Critical points of the displacement function of an isometry</i>	411
Ramanujam, S., <i>Morse theory of certain symmetric spaces</i>	213
Richardson, R. W., Jr., <i>Deformations of subalgebras of Lie algebras</i>	289
Segal, G. B., <i>See Atiyah, M. F. & Segal, G. B.</i>	1
Smyth, B., <i>See Nomizu, K. & Smyth, B.</i>	367
Stone, A. P., <i>Higher order conservation laws</i>	447
Tanno, S. & Weber, W. C., <i>Closed conformal vector fields</i>	361

CONTENTS

Tsagas, G., <i>Some properties of negative pinched Riemannian manifolds of dimensions 5 and 7</i>	523
Van Quê, N., <i>Nonabelian Spencer cohomology and deformation theory</i> ..	165
Wang, H. C., <i>Discrete nilpotent subgroups of Lie groups</i>	481
Weber, W. C., <i>See Tanno, S. & Weber, W. C.</i>	361
Wolf, J. A., <i>Symmetric spaces which are real cohomology spheres</i>	59
Wu, H., <i>Remarks on the first main theorem in equidistribution theory</i> . III	83
———, <i>Remarks on the first main theorem in equidistribution theory</i> . IV	433
Yano, K. & Ishihara, S., <i>On a problem of Nomizu-Smyth for a normal contact Riemannian manifold</i>	45