

Acta Informatica
 Applied Mathematics and Optimization
 Applied Physics
 Archiv für Elektrotechnik
 Archive for History of Exact Sciences
 Archive for Rational Mechanics and Analysis
 Archives of Environmental Contamination and Toxicology
 Archives of Microbiology
 Astronomy and Astrophysics
 Bauingenieur
 Behavioral Ecology and Sociobiology
 Biological Cybernetics
 Biophysics of Structure and Mechanism
 Bulletin of Environmental Contamination and Toxicology
 Carlsberg Research Communications
 Chromosoma
 Communications in Mathematical Physics
 Contributions to Mineralogy and Petrology
 Current Genetics
 Current Microbiology
 Differentiation
 Environmental Geology
 Environmental Management
 European Journal of Applied Microbiology and Biotechnology
 European Journal of Biochemistry
 Fresenius' Zeitschrift für Analytische Chemie
 Holz als Roh- und Werkstoff
 Informatik-Spektrum
 Ingenieur-Archiv
 Inventiones mathematicae
 Irrigation Science
 Journal of Comparative Physiology
 A. Sensory, Neural, and Behavioral Physiology
 B. Biochemical, Systemic, and Environmental Physiology
 Journal of Geophysics/
 Zeitschrift für Geophysik
 Journal of Mathematical Biology
 The Journal of Membrane Biology
 Journal of Molecular Evolution
 Konstruktion im Maschinen-, Apparate- und Gerätebau
 manuscripta mathematica
 Marine Biology
 The Mathematical Intelligencer
 Mathematical Systems Theory
 Mathematische Annalen
 Mathematische Zeitschrift
 Metrologia
 Microbial Ecology
 Mineralium Deposita
 MGG Molecular & General Genetics
 Die Naturwissenschaften
 Numerische Mathematik
 Oecologia
 OR-Spektrum
 Operations Research-Spektrum
 Physics and Chemistry of Minerals
 Planta
 Polymer Bulletin
 Public International Law
 Radiation and Environmental Biophysics
 Roux's Archives of Developmental Biology
 Semigroup Forum
 Siemens Forschungs- und Entwicklungsberichte/Research and Development Reports
 Theoretica Chimica Acta

Springer Journals keeping you in pace with science.

Springer journals are known and respected internationally for keeping professionals in science and in medicine, in research and in industry well-informed about the rapid progress in their fields. Decide for yourself by sending in one of the order coupons.

To: **The Head Librarian/The Library Committee**

From: _____

Department: _____

- I/we have studied the Springer Journal(s)

- and recommend that the journal(s) be purchased for the Main/Department Library
- I/we would like to see the Springer Journals Catalog with information on subscriptions/back volumes/microform
- Please obtain sample copies on other related Springer Journals and/or latest index/sample copy including volume-index

SUBSCRIPTION ORDER FORM

SPRINGER-VERLAG BERLIN HEIDELBERG NEW YORK

Please order through your bookseller:

or Springer-Verlag, P.O. Box 105 280, D-6900 Heidelberg,
 (All countries except North America)
 or (North America) Springer-Verlag New York Inc.,
 175 Fifth Avenue, New York, NY 10010, USA
 North America subscriptions are entered with prepayment only.

- Please enter my/our subscription to (please give title or ISSN)

Full subscription information is given on inside front or back cover page

Name: _____

Address: _____

Date/Signature: _____

- This is a new order This is a renewal order

Please send a sample copy and/or latest index/sample copy including volume-index (supply is limited):

To: The Head Librarian/The Library Committee

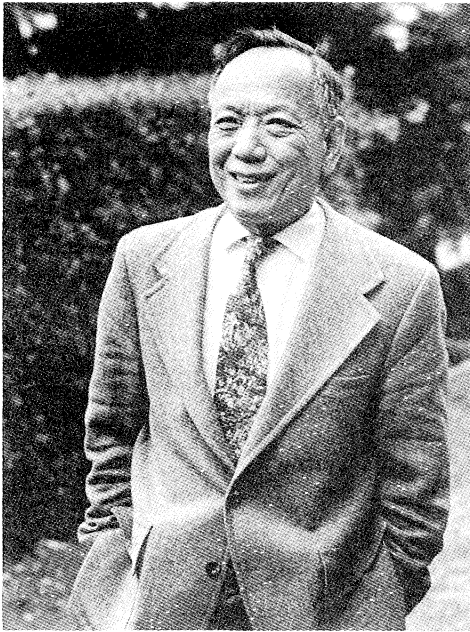
Postcard - Airmail

To the bookseller

- Wärme- und Stoffübertragung/
Thermo- and Fluid Dynamics
- Werkstattstechnik
- wt - Zeitschrift für industrielle Fertigung
- Wood Science and Technology
- Zeitschrift für Lärmbekämpfung
- Zeitschrift für Lebensmittel-Untersuchung
und -Forschung
- Zeitschrift für Physik A
Atoms and Nuclei
- Zeitschrift für Physik B
Condensed Matter
- Zeitschrift für Physik C
Particles and Fields
- Zeitschrift für Wahrscheinlichkeitstheorie
und verwandte Gebiete
- Probability Theory and Stochastics
- Zentralblatt für Mathematik und ihre
Grenzgebiete/Mathematics Abstracts
- Zoomorphology



Springer-Verlag
Berlin
Heidelberg
New York



S.-s. Chern

Complex Manifolds Without Potential Theory

(With an appendix on the geometry of characteristic classes)

Universitext

2nd edition 1979 V, 152 pages
DM 25,-, approx. US \$ 11.90
ISBN 3-540-90422-0

This is a short introduction to complex manifolds, including sheaf theory, vector bundles, connections, curvature forms, and characteristic classes. The second edition contains a new appendix on the geometry of characteristic classes and a new treatment of the Chern-Simons invariants which is more adaptable to applications. Applications of Chern's concepts include gauge theory and Yau's proof of the Calabi conjecture.

The Chern Symposium 1979

Proceedings of the International Symposium on Differential Geometry in honor of S.-s. Chern, held in Berkeley, California, June 1979

Editors: W.-Y. Hsiang, S. Kobayashi, I. M. Singer, A. Weinstein, J. Wolf, Hung-Hsi Wu

1980. VII, 259 pages
Cloth DM 56,-; approx. US \$ 26.70
ISBN 3-540-90537-5

Contents:

M. F. Atiyah: Real and Complex Geometry in Four Dimensions. – *R. Bott:* Equivariant Morse Theory and the Yang-Mills Equation on Riemann Surfaces. – *E. Calabi:* Isometric Families of Kähler Structures. – *M. Green, P. Griffiths:* Two Applications of Algebraic Geometry to Entire Holomorphic Mappings. – *F. Hirzebruch:* The Canonical Map for Certain Hilbert Modular Surfaces. – *N. H. Kuiper:* Tight Embeddings and Maps. Submanifolds of Geometrical Class Three in E^N . – *J. Moser:* Geometry of Quadrics and Spectral Theory. – *L. Nirenberg:* Remarks on Nonlinear Problems. – *R. Ossermann:* Minimal Surfaces, Gauss Maps, Total Curvature, Eigenvalue Estimates, and Stability. – *W.-T. Wu:* de Rham-Sullivan Measure of Spaces and Its Calculability. – *C. H. Yang:* Fibre Bundles and the Physics of the Magnetic Monopole. – *S.-T. Yau:* The Total Mass and the Topology of an Asymptotically Flat Space-Time.

S.-s. Chern

Selected Papers

1978. 2 portraits. XXI, 476 pages (34 pages in German, 36 pages in French)
Cloth DM 57,-; approx. US \$ 27.20
ISBN 3-540-90339-9

The papers in this volume comprise approximately a third of S.-s. Chern's total mathematical work to date. The selection has been made by the author himself, preference being given to his shorter and less accessible papers. In addition to the papers, the volume contains two articles by Phillip Griffiths and André Weil and a "Summary of My Scientific Life and Works" by Shiing-shen Chern himself.



Springer-Verlag Berlin Heidelberg New York

Communications in
**Mathematical
Physics**

Chief Editor A. Jaffe, Cambridge, MA

Editorial Board H. Araki, Kyoto
J. Ginibre, Orsay
J. Glimm, New York, NY
R. Haag, Hamburg
J. L. Lebowitz, New Brunswick, NJ
E. Lieb, Princeton, NJ
J. Moser, Zürich
K. Osterwalder, Zürich
D. Ruelle, Bures-sur-Yvette
B. Simon, Pasadena, CA
Ya. G. Sinai, Moscow
R. Stora, Geneva
S.-T. Yau, Princeton, NJ

Advisory Board M. F. Atiyah, Oxford
A. Connes, Bures-sur-Yvette
S. Hawking, Cambridge
G. 't Hooft, Utrecht
C. N. Yang, Stony Brook, NY

Responsible for advertisements
Springer-Verlag
Printers
Printed in Germany

E. Lückermann, Kurfürstendamm 237, D-1000 Berlin 15
Telephone: (030) 882.1031, Telex 01-85411
Berlin Heidelberg New York
Brühlsche Universitätsdruckerei, Giessen
© Springer-Verlag GmbH & Co. KG Berlin Heidelberg 1981
Das Heft enthält eine Beilage des Springer-Verlages
Berlin Heidelberg New York