For more than sixty years, this world-renowned research journal has been dedicated to reporting important developments in modern physics. In order to better serve the physics community and maintain its own high standards. the journal is divided into four sections. Each section is selfcontained and may be ordered separately. All four sections are published in English. Part D appears for the first time in 1986. It replaces the "Atoms" section of Part A, expanding it to cover the whole field of atomic, molecular, cluster, and chemical physics in one single journal. A special price for subscribers of part A and D is available. Please ask for details.

All parts of

Zeitschrift für Physik

- publish rapidly in English (within three months of a manuscript being accepted)
- accept full-length papers and short notes
- collect no page charges and offer authors fifty free reprints per article
- feature special issues and invited progress reports to focus attention on areas of particular current interest

Subscription Information and/or sample copies from the publisher.

Springer-VerlagBerlin Heidelberg New York London Paris Tokyo

Heidelberger Platz 3, D-1000 Berlin 33 175 Fifth Ave, New York, NY 10010, USA 28, Lurke Street, Bedford MK40 3HU, England 26, rue des Carmes, F-75005 Paris 37-3, Hongo 3-chome, Bunkyo-ku, Tokyo 113, Japan devoted to reporting on all of modern physics ...

Zeitschrift für Physik

Zeitschrift für Physik A Atomic Nuclei

ISSN 0340-2193 Title No. 218

Editor-in-Chief: H.A. Weidenmüller,
Heidelberg

Section A is devoted to experimental and theoretical studies of nuclear systems. This field of research is growing in importance and being extended to everhigher energies as new and more powerful accelerators are brought into service. In this respect, contributions reporting research on nuclear reactions with very heavy ions, nuclear structure at the boundaries of stability, dense and highly excited nuclear matter (e.g., quarkgluon plasmas) are particularly welcome.



ISSN 0722-3277 Title No. 257

Managing Editors: M. Campagna, Jülich; H. Horner, Heidelberg

Section B covers the physics of condensed matter and general physics. In this section papers on the physical properties of crystalline, disordered, and amorphous solids, and on classical and quantum liquids will be published. Examples would be papers on superconductivity, phase transitions, surface effects, and studies of dynamic process performed with the help of photon, electron, or neutron scattering. Emphasis is also put on quantum optics and statistical physics, especially in the area of nonequilibrium processes and cooperative phenomena. Papers on molecular physics that relate to problems of consensed matter are also invited.



ISSN 0170-9739 Title No. 288

Editor-in-Chief: G. Kramer, Hamburg

Zeitschrift für Physik C, Particles and Fields, is devoted to the experimental and theoretical investigations of elementary particles. In view of the steadily growing interplay of theory and experiment in this field, particular emphasis is given to a clear and complete presentation or research.

Fields on interest: Experimental and theoretical particle physics; structure of elementary particles; high energy processes; strong, electromagnetic and weak interactions; symmetry principles; quantum field theory; field theory on the lattice.

Atoms, Molecules Zeitschrift and Clusters

ISSN 0178-7683 Title No. 460 **Editor-in-Chief: I. V. Hertel,** Berlin

Modern research employs to an increasing extent similar techniques in these fields: laser spectroscopy, UV- and synchrotron-radiation experiments, multiphoton processes, etc., and the papers published in the new Section D will reflect this overlap. The focus will be on free atoms, molecules, and clusters and their properties and interactions as individual entities in gaseous, liquid, and solid environments. All aspects of atomic, molecular, and cluster structure, spectroscopy, interactions, dynamics, production, fragmentation, and ionization will be covered. Other topics to be included: heavy-ion atomic physics, muonic, pionic, and other exotic atoms; hyperfine interactions; electron and positron scattering; collisions in experiment and theory; structure and stability calculations; statistical and dynamic theories of inter- and intramolecular processes.

Springer 🔊

Communications in **Mathematical Physics**

Chief Editor A. Jaffe, Cambridge, MA

Editorial Board L. Alvarez-Gaumé, Genève

H. Araki, Kvoto

J.-P. Eckmann, Genève M. E. Fisher, Ithaca, NY

J. Fröhlich, Zürich R. Haaq, Hamburg

J. L. Lebowitz, New Brunswick, NJ

J. Mather. Princeton, NJ K. Osterwalder, Zürich

G. Parisi, Roma

B. Simon, Pasadena, CA Ya. G. Sinai, Moscow T. Spencer, Princeton, NJ C. H. Taubes, Cambridge, MA

S.-T. Yau, La Jolla, CA

Advisory Board M. F. Ativah, Oxford

F. Hirzebruch, Bonn

G. 't Hooft, Utrecht

R. Schrieffer, Santa Barbara, CA

I. Singer, Cambridge, MA C. N. Yang, Stony Brook, NY