Mathematical Physics

Volume 49 Number 3 1976

Chief Editor J. Glimm, New York, N. Y.

Editorial Board H.

H. Araki, Kyoto G. Gallavotti, Rome R. Geroch, Chicago, III. R. Haag, Hamburg W. Hunziker, Zürich

A. Jaffe, Cambridge, Mass. J. L. Lebowitz, New York, N. Y. J. Moser, New York, N. Y.

R. Stora, Marseille

Advisory Board

K. Hepp, Zürich R. Jost, Zürich

M. C. Polivanov, Moscow D. Ruelle, Bures-sur-Yvette A. S. Wightman, Princeton, N. J.



Springer-Verlag Berlin Heidelberg New York

Communications in Mathematical Physics

It is a fundamental condition that submitted manuscripts have not been, and will not simultaneously be submitted or published elsewhere. With the acceptance of a manuscript for publication, the publishers acquire full and exclusive copyright for all languages and countries. Unless special permission has been granted by the publishers, no photographic reproductions, microform or any other reproductions of a similar nature may be made of the journal, of individual contributions contained therein or of extracts therefrom.

100 offprints of each article will be supplied to the author free-of-charge and additional copies may be obtained at cost price if ordered before the issue goes to press.

Manuscripts may be sent to.

Prof. H. Araki, Research Institute for Mathematical Sciences, Kyoto University, Kyoto 606, Japan

Prof. G. Gallavotti, Istituto Matematico dell' Università, Piazzale delle Scienze, I—00185 Roma, Italy (send registered mail)

Prof. R. Geroch, E. Fermi Institute, University of Chicago, 933 East 56 Street, Chicago, III. 60637, USA

Prof. J. Glimm, The Rockefeller University, 1230 York Avenue, New York, N.Y. 10021, USA

Prof. R. Haag, II. Institut für Theoretische Physik, Luruper Chaussee 149, D-2000 Hamburg 50, Federal Republic of Germany

Prof. W. Hunziker, Theoretische Physik, E.T.H. Zürich, Hönggerberg, CH — 8049 Zürich, Switzerland

Prof. A. Jaffe, Lyman Laboratory of Physics, Harvard University, Cambridge, Mass. 02138, USA

Prof. J. L. Lebowitz, Belfer Graduate School of Science, Yeshiva University, New York, N. Y. 10033, USA

Prof. J. Moser, New York University, Courant Institute of Mathematical Sciences, 251 Mercer Street, New York, N. Y. 10012, USA

Prof. R. Stora, Centre National de la Recherche Scientifique, Centre de Physique Théorique, 31, chemin J. Aiguier, F—13274 Marseille, Cedex 2, France

Mathematical methods (Functional analysis, operator algebra and group theory, with direct relevance to physics)

Equilibrium statistical mechanics (Thermodynamic functions, phase transitions, equilibrium states, exactly soluble models)

General relativity

Chief Editor

General structure of quantum field theory and foundations of quantum mechanics

Classical and quantum mechanics of finitely many degrees of freedom

Constructive quantum field theory

Nonequilibrium statistical mechanics (Time development of infinite systems, ergodic theory, transport theory, random processes, dissipative phenomena)

Dynamical systems (Differential equations and their application to physical systems)

Lagrangian quantum field theory

In order to avoid delay in publication this journal appears in loose numbers which can be subsequently assembled in volumes.

Subscription Information

Volumes 46-51 (3 issues each) will appear in 1976. The publisher reserves the right to issue additional volumes during the calendar year. Information about obtaining back volumes and microform editions available upon request.

All Countries (Except North America). Subscription rate: DM 888,—, plus postage and handling. Orders can either be placed with your bookdealer or sent directly to: Springer-Verlag, Heidelberger Platz 3, D–1000 Berlin 33.

North America. Subscription rate: \$ 372.40, including postage and handling. Subscriptions are entered with prepayment only. Orders should be addressed to: Springer-Verlag New York Inc., 175 Fifth Avenue, New York, N.Y. 10010.

Springer-Verlag

Journal Production Dept. I Postfach 105 280 D–6900 Heidelberg 1 Telephone (062 21) 487-1 Telex 04–61690 Heidelberger Platz 3 D–1000 Berlin 33 Telephone (030) 822001 Telex 01–83319 175 Fifth Avenue New York, N.Y. 10010 Telephone (212) 673-2660 Telex 23-2235