

Communications in
**Mathematical
Physics**

Volume 39 Number 3 1974

Chief Editor K. Hepp, Zürich

Editorial Board H. Araki, Kyoto
J. Ehlers, München
G. Gallavotti, Napoli
R. Haag, Hamburg
W. Hunziker, Zürich
J. L. Lebowitz, New York
J. Moser, New York
K. Symanzik, Hamburg
A. S. Wightman, Princeton

Advisory Board R. Jost, Zürich
M. C. Polivanov, Moscow
D. Ruelle, Bures-sur-Yvette



Springer-Verlag
Berlin Heidelberg New York

Commun. math. Phys. - CMPHAY 39 (3) 165-250 (1974) 23. XII, 1974

Communications in Mathematical Physics

It is a fundamental condition that manuscripts have not been, and will not be published or submitted for publication elsewhere, either simultaneously or at a later date. With the acceptance of a manuscript for publication, the publishers acquire the sole 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.

75 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, Japan

Prof. J. Ehlers, Max-Planck-Institut für Physik und Astrophysik, Föhringer Ring 6, D-8000 München 40, Bundesrepublik Deutschland

Prof. G. Gallavotti, Università di Napoli, Istituto di Fisica Teorica, Mostra d'Oltremare, I-80125 Napoli, Italia (send registered mail)

Prof. R. Haag, from September 1, 1974 to August 1, 1975: CERN, Theory Division, CH-1211 Geneva 23, Switzerland

Prof. K. Hepp, Theoretische Physik, E.T.H. Zürich, Hönggerberg, CH-8049 Zürich, Schweiz

Prof. W. Hunziker, Theoretische Physik, E.T.H. Zürich, Hönggerberg, CH-8049 Zürich, Schweiz

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. K. Symanzik, DESY, Notkestieg 1, D-2000 Hamburg 52, Bundesrepublik Deutschland

Prof. A. S. Wightman, Princeton University, Jadwin Hall, Princeton, N. J. 08540, USA

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

General relativity (Gravitation and classical field theory)

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

General structure of quantum field theory and foundations of quantum mechanics

Chief Editor

Classical and quantum mechanics of finitely many degrees of freedom

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 (Perturbative approach)

Constructive quantum field theory

In order to avoid delay in publication this journal appears in loose numbers which can be subsequently assembled in volumes. One volume usually consists of 4 numbers. The price of one volume is DM 128,— plus postage and handling.

Springer-Verlag

D-6900 Heidelberg 1
Postfach 105 280
Telefon (06221) 487-1
Telex 04-61 690

D-1000 Berlin 33
Heidelberger Platz 3
Telefon (030) 822001
Telex 01-83319

Springer-Verlag
New York Inc.
175 Fifth Avenue
New York, N. Y. 10001