Communications in Mathematical Physics

Volume 74 Number 3 1980

A. J. Kupiainen

1/n Expansion for a Quantum Field Model 199

S. Goldstein

Remarks on the Global Markov Property 223

P.M. Bleher, M. D. Missarov

The Equations of Wilson's Renormalization Group

and Analytic Renormalization. I. General

Results

P.M. Bleher, M. D. Missarov

The Equations of Wilson's Renormalization Group and Analytic Renormalization. II. Solution of

On the Possible Temperatures of a Dynamical

Wilson's Equations 255

T. Spencer

The Lipatov Argument 273

O. Bratteli, G. A. Elliott, R. H. Herman

System 281

Indexed in Current Contents



Springer-Verlag Berlin Heidelberg New York

Commun. Math. Phys. ISSN 0010-3616 CMPHAY 74(3) 199—296 (1980)

Communications in Mathematical Physics

Copyright. It is a fundamental condition that submitted manuscripts have not been published and will not be simultaneously submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproductions, microform or any other reproductions of similar nature, and translations. Photographic reproduction, microform, or any other reproduction of text, figures, or tables from this journal is prohibited without permission obtained from the publisher.

Special Regulations for the USA. The Article Fee Code on the first page of an article in this journal indicates the copyright owner's consent that in the USA copies may be made for personal or internal use, provided the stated fee for copying beyond that permitted by Section 107 or 108 of the United States Copyright Law is paid through the Copyright Clearance Center, Inc., P. O. Box 8891, Boston, MA 02114. If a code does not appear, copies of the article may be made without charge, provided permission is obtained from the publisher.

The copyright owner's consent does not extend to copying for general distribution, for promotion, for creating new works, or for resale. Specific written permission must be obtained from the publisher for such copying.

Authors should mark manuscripts according to the "Instructions to Authors" and send them to:

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

Prof. E. Brézin, Service de Physique Théorique, CEN Saclay, B. P. 2, F-91190 Gif-sur-Yvette, France

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

Prof. J. Ginibre, Laboratoire de Physique Théorique et Hautes Énergies, Université de Paris IX, Batiment 211, F-91405 Orsay, France Prof. J. Glimm, The Rockefeller University, 1230 York Avenue, New York, NY 10021, USA

Prof. R. Haag, II. Institut für Theoretische Physik, Luruper Chaussee 149, D-2000 Hamburg 50, Federal Republic of Germany Prof. A. Jaffe, Lyman Laboratory of Physics, Harvard University, Cambridge, MA 02138, USA

Prof.J.L.Lebowitz, Department of Mathematics, Rutgers University, New Brunswick, NJ 08903, USA

Prof. E. Lieb, Physics Department, Princeton University, P.O. Box 708, Princeton, NJ 08540, USA

Prof. J. Moser, Department of Mathematics, E.T.H. Zentrum, CH-8092 Zürich, Switzerland

Prof. K. Osterwalder, E.T.H. Zentrum, CH-8092 Zürich, Switzerland

Prof. D. Ruelle, IHES, F-91440 Bures-sur-Yvette, France
Prof. B. Simon, Jadwin Physics Laboratory, Princeton University,
Princeton, NJ 08540, USA

Prof. Ya. G. Sinai, L. D. Landau Institute for Theoretical Physics, Academy of Sciences, Vorobyevskoe Shosse, 2, 117334 Moscow, USSR

Prof. R. Stora, from Sept. 1, 78 to Aug. 31, 80: CERN, Theory Division, CH-1211 Geneva 23, Switzerland

Mathematical methods with direct relevance to physics

Quantum fields and statistical mechanics

General relativity, cosmology

Quantum mechanics

Fluid mechanics

Conceptual structure

Chief Editor

Nonequilibrium statistical mechanics

Equilibrium statistical mechanics

Classical dynamical systems

Constructive quantum field theory and general theory of quantized fields Dissipative dynamical systems Scattering theory and atomic physics

Statistical physics and dynamical systems

Lagrangian quantum field theory

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.

Subscription Information. Volumes 71-77 (3 issues each) will appear in 1980. The price of each volume is DM 164.00 or US \$91.00. Information about obtaining back volumes and microform editions available upon request.

Change of address. Six weeks should be allowed for all changes to become effective. All communications should include both old and new addresses (with postal codes) and should be accompanied by an address label from a recent issue.

North America. Subscription rate: US \$660.50, including postage and handling. Subscriptions are entered with prepayment only. Orders should be addressed to: Springer-Verlag New York Inc., Service Center Secaucus, 44 Hartz Way, Secaucus, NJ 07094, USA, Telephone (201) 348-4033, Telex 0023125994.

Japan. Subscription rate: DM 1225.00 including postage (Surface Airmail Lifted) and handling.

All Other Countries. Subscription rate: DM 1148.00, plus postage and handling. Orders for all countries except North America can either be placed with your bookdealer or sent directly to: Springer-Verlag, Heidelberger Platz 3, D-1000 Berlin 33.

Springer-Verlag Postfach 105280 D-6900 Heidelberg 1 Telephone (06221) 487328 Telex 04-61 690 Springer-Verlag Heidelberger Platz 3 D-1000 Berlin 33 Telephone (030) 8207-1 Telex 01-83319 Springer-Verlag New York Inc. 175 Fifth Avenue New York, NY 10010, USA Telephone (212) 477-8200 Telex 0023 232 235