Mathematical Physics

Volume 72 Number 3, 1980

J. Bros, M.Manolessou-Grammaticou

Renormalized *G*-Convolution of *N*-Point Functions in Quantum Field Theory: Convergence in the Euclidean Case II 207

G. Bandelloni, C. Becchi, A. Blasi, R. Collina On the Cancellation of Hard Anomalies in Gauge Field Models: a Regularization Independent Proof 239

J. K. Beem

Minkowski Space-Time is Locally Extendible 273

C. H. Taubes

Arbitrary N-Vortex Solutions to the First Order

Ginzburg-Landau Equations 277

V. Rivasseau, E. Speer

The Borel Transform in Euclidean φ^4 Local Existence for Rev<4 293

Indexed in Current Contents



Springer-Verlag
Berlin Heidelberg New York

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 Feé 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

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, New York University, Courant Institute of Mathematical Sciences, 251 Mercer Street, New York, NY10012, USA *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 re-

quest.

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

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 04-61690

from a recent issue.

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 00232323235