Instructions to Authors

Authors are kindly requested to note the following points:

Manuscripts should be submitted in duplicate, with double spacing. They may be written in English, French or German, but in every case a summary (abstract) in English should be enclosed. The paper must be in its final form in order to avoid corrections of the proofs. Changes in content and style are to be avoided; expenses accruing from such additional corrections will be charged to the authors.

The symbols employed must be so clearly marked that even a layman could have no doubts as to their placing and interpretation. Special type should be indicated by underlining in color. In order to facilitate the compositor's task we recommend the underlining of Greek characters in red, Gothic in blue, Script in green. In each case capital letters are characterized by underlining twice, lower case letters by underlining once. Handwritten Roman characters should be avoided if possible. Bold face type for individual symbols is indicated by underlining with a wavy line in pencil. It is most helpful if formulae are type-written and Roman characters are employed also for Gothic and Script and simply distinguished by underlining in colour. The underlining of formulae and mathematical signs by means of a typewriter should be avoided; this would inevitably lead to inclusion in the composition as part of the mathematical symbol. All letters contained in formulae as well as single letters in the text are automatically composed in italics. Hence, abbreviations that appear in formulae and are to be composed in Roman type (the type normally used for the text) should be specially marked (by underlining in yellow, if possible). The fact that typewriters usually show no difference between the figure 0 (zero) and the letter O, nor frequently, between 1 (one) and the letter 1 leads to considerable confusion. Here it is absolutely essential that each letter and each numeral be individually distinguished. The numeral 1 should be written clearly as such (i. e. with a preceding hook) and not merely as a downward stroke. The latter is particularly disastrous where 1 appears as a superscript. In manuscripts written in English, in which the small (Roman) letter a is employed as a mathematical symbol care must be taken to avoid any confusion with the indefinite article.

Footnotes which do not belong to the head of the article should be numbered consecutively.

References to the literature should appear not as footnotes but as a numbered and complete bibliography at the end of the article. Journal articles should be cited by initials and name(s) of all author(s), the internationally recognized abbreviation for the name of the journal, the volume, the numbers of the first and last pages and the year of publication. Citations of books should include the author(s), full title, edition, place of publication, publisher and year of publication. In the text a reference to the bibliography should be indicated by the corresponding number enclosed in square brackets and placed on the same level as the rest of line (e. g. [5]).

Diagrams and illustrations should be submitted on separate sheets, apart from the text. A clear unambiguous sketch is satisfactory, since it will be redrawn by the publisher.

75 reprints 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. R. Haag, II. Institut für theoretische Physik der Universität,

D 2000 Hamburg 50, Luruper Chaussee 149

Prof. N. M. Hugenholtz, Inst. f. theoret. Phys., University of Groningen, The Netherlands

Prof. H. Joos, DESY, D 2000 Hamburg 52, Notkestieg 52

Prof. J. Leray, Collège de France, Laboratoire de Mathématique, Place Marcelin Berthelot, F 75 Paris V

Prof. D. Ruelle, Institute for Advanced Study, Princeton, N. J. 08540 U.S.A.

Prof. A. Taub, Computer Center, Univ. of California, Berkeley 4, California 94720 U.S.A.

All business communications should be directed to

Springer-Verlag, D 6900 Heidelberg 1, Germany, Postfach 1780, Tel. (06221) 49101, Telex 04-61723

Communications in Mathematical Physics

Volume 19 · Number 4 · 1970

Contents

| Fisher, M. E., Lebowitz, J. L.: Asymptotic Free Energy of a System with Periodic Boundary Conditions | 251 |
|--|-----|
| Henle, M.: Spatial Representation of Groups of Automorphisms of von Neumann Algebras with Properly Infinite Commutant | 273 |
| Chase, J. E.: Event Horizons in Static Scalar-Vacuum Space-Times | 276 |
| Karowski, M.: Über Superpropagatoren | 289 |
| Roepstorff, G.: Coherent Photon States and Spectral Condition | 301 |
| Audretsch, J., Graf, W.: Neutrino Radiation in Gravitational Fields | 315 |
| Boulware, D. G., Deser, S.: Classical Schwinger Terms | 327 |
| | |

Indexed in Current Contents

Responsible for advertisements: Edgar Seidler, D 1 Berlin 15, Kurfürstendamm 237 Telephone: (03 11) 8 83 37 55, Telex: 01-82811 Springer-Verlag, Berlin · Heidelberg · New York Brühlsche Universitätsdruckerei, Gießen Printed in Germany — © by Springer-Verlag 1970

Communications in Mathematical Physics

Volume 19 · Number 4 · 1970

Contents

| Fisher, M. E., Lebowitz, J. L.: Asymptotic Free Energy of a System with Periodic Boundary Conditions | 251 |
|--|-----|
| Henle, M.: Spatial Representation of Groups of Automorphisms of von Neumann Algebras with Properly Infinite Commutant | 273 |
| Chase, J. E.: Event Horizons in Static Scalar-Vacuum Space-Times | 276 |
| Karowski, M.: Über Superpropagatoren | 289 |
| Roepstorff, G.: Coherent Photon States and Spectral Condition | 301 |
| Audretsch, J., Graf, W.: Neutrino Radiation in Gravitational Fields | 315 |
| Boulware, D. G., Deser, S.: Classical Schwinger Terms | 327 |
| | |

Indexed in Current Contents

Responsible for advertisements: Edgar Seidler, D 1 Berlin 15, Kurfürstendamm 237 Telephone: (03 11) 8 83 37 55, Telex: 01-82811 Springer-Verlag, Berlin · Heidelberg · New York Brühlsche Universitätsdruckerei, Gießen Printed in Germany — © by Springer-Verlag 1970

Communications in Mathematical Physics

Volume 19 · Number 4 · 1970

Contents

| Fisher, M. E., Lebowitz, J. L.: Asymptotic Free Energy of a System with Periodic Boundary Conditions | 251 |
|--|-----|
| Henle, M.: Spatial Representation of Groups of Automorphisms of von Neumann Algebras with Properly Infinite Commutant | 273 |
| Chase, J. E.: Event Horizons in Static Scalar-Vacuum Space-Times | 276 |
| Karowski, M.: Über Superpropagatoren | 289 |
| Roepstorff, G.: Coherent Photon States and Spectral Condition | 301 |
| Audretsch, J., Graf, W.: Neutrino Radiation in Gravitational Fields | 315 |
| Boulware, D. G., Deser, S.: Classical Schwinger Terms | 327 |
| | |

Indexed in Current Contents

Responsible for advertisements: Edgar Seidler, D 1 Berlin 15, Kurfürstendamm 237 Telephone: (03 11) 8 83 37 55, Telex: 01-82811 Springer-Verlag, Berlin · Heidelberg · New York Brühlsche Universitätsdruckerei, Gießen Printed in Germany — © by Springer-Verlag 1970