INSTRUCTIONS TO AUTHORS

A. General

In upper right corner of title page **write by hand** "For CMP".

Manuscripts should be submitted in duplicate. They should preferably be written in English; papers in French or German are also accepted.

Manuscripts must be in their **final form,** typed on one side of each sheet only, with double spacing and wide margins. Formulae should be typewritten whenever possible. Mimeographed copies are not acceptable unless clearly legible.

Please include a "Note for the Printer" explaining markings used. See suggestion overleaf.

To speed up publication, authors will receive **only one set of proofs:** provisionally numbered page proofs. Authors are requested to **correct typographical errors only;** they will be charged for corrections involving changes, additions or deletions to the original manuscript.

Diagrams should be submitted on separate sheets, not included in the text. They should be drawn in Indian ink in clean uniform lines, the whole about twice the size of the finished illustration. Inscriptions should allow for the figure 1, for example, to be about 2 mm high in the final version (i.e. 4 mm for reduction $\times \frac{1}{2}$). The author should mark in the margin of the manuscript where diagrams may be inserted.

Footnotes, other than those which refer to the title heading, should be numbered consecutively and placed at the foot of the page to which they refer (not at the end of the article).

Please give on the first page of the manuscript a **running head** (condensed title), which should not exceed 70 letters including spaces.

References to the literature should be listed at the end of the manuscript. The following information should be provided for **journal articles:** names and initials of all authors, name of the journal, volume, first and last page numbers and year of publication. References to **books** should include name(s) of author(s), full title, edition, place of publication, publisher and year of publication.

Examples

Bombieri, E., Giusti, E.: Inventiones math. **15**, 24–46 (1971)

Tate, J. T.: *p*-Divisible groups. In: Proceedings of a conference on local fields, pp. 158–183. Berlin-Heidelberg-New York: Springer 1967

B. Marking

1. Text

The words **"Theorem"**, **"Lemma"**, **"Corollary"**, **"Proposition"** etc. are normally printed in **boldface**, followed by the formulation in italics (to be underlined in the manuscript).

The words "*Proof*", "*Remark*", "*Definition*", "*Note*" etc. are printed in *italics* with the formulation in ordinary typeface.

Words or sentences to be set in italics should be marked by single underlining.

2. Formulae

Letters in formulae are normally printed in italics, figures in ordinary typeface.

It will help the printer if in doubtful cases the position of indices and exponents is marked thus: $b_\wedge$, $a_\vee$. Spacing of indices and exponents must be specially indicated ($A_m{}^n{}_n{}^m$) otherwise they will be set (A_{mn}^{nm}).

Underlining for special alphabets and typefaces should be done according to the following code:

single underlining:	small letter
double underlining:	capital letter
brown:	boldface headings, boldface letters in formulae
yellow:	upright
	(abbreviations e. g. Re, Im, log, sin, ord, id, lim, sup, etc.)
red:	Greek
blue:	Gothic
green:	Script
violet:	the numeral 1, and zero (to distinguish them from the small letter l and the capital letter O)

The following are frequently confused:

$\cup$, $\mathbf{u}$, $\bigcup$, U; $\quad \circ, o, O, 0$; $\quad\quad \times, x, X, \kappa$; $\quad\quad \vee, v, \nu$; $\quad\quad \theta, \Theta, \phi, \varphi, \Phi, \emptyset$; $\quad\quad \psi, \Psi$; $\quad\quad \varepsilon, \in$;

a', a^1; $\quad$ the symbol a and the indefinite article a;

also the handwritten Roman letters:

c, C; $\quad e, l$; $\quad I, J$; $\quad k, K$; $\quad o, O$; $\quad p, P$; $\quad s, S$; $\quad \cdot u, U$; $\quad v, V$; $\quad w, W$; $\quad x, X$; $\quad z, Z$;

Please take care to distinguish them in some way.

C. Examples

1. Special alphabets or typefaces

Script	$\mathcal{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z}$
	$a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z$
Sanserif	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
	a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z
Gothic	$\mathfrak{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y}$, 3
	$\mathfrak{a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z}$
Boldface	**A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z**
	a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z
Special Roman	$\mathbb{A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z}$, 1
Greek	$\Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Phi, \Psi, \Omega$
	$\alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \varphi, \phi, \chi, \psi, \omega$

2. Notations

preferred form	instead of	preferred form	instead of
$A^*, \hat{b}, \gamma', \mathfrak{v}, \mathbf{v}$	$\bar{A}, \hat{b}, \check{\gamma}, \tilde{v}$	$f: A \to B$	$A \xrightarrow{f} B$
lim sup, lim inf	$\overline{\lim}, \underline{\lim}$		
inj lim, proj lim	$\varinjlim, \varprojlim$		$\cos \dfrac{1}{x}$
$\exp(-(x^2+v^2)/a^2)$	$e^{-\frac{x^2+v^2}{a^2}}$	$\dfrac{\cos(1/x)}{(a+b/x)^{1/2}}$	
f^{-1}	$\overset{-1}{f}$		$\sqrt{a+\dfrac{b}{x}}$

Springer Journals keeping you in pace with science

Springer journals are known and respected internationally for keeping professionals in science and in medicine, in research and in industry well-informed about the rapid progress in their fields. Decide for yourself by sending in one of the order coupons.

To: **The Head Librarian/The Library Committee**

From: _____

Department: _____

☐ I/we have studied the Springer Journal(s)

_____

☐ and recommend that the journal(s) be purchased for the Main/Department Library

☐ I/we would like to see the Springer Journals Catalog with information on subscriptions/back volumes/microform

☐ Please obtain sample copies on other related Springer Journals and/or latest index/sample copy including volume-index

SUBSCRIPTION ORDER FORM

SPRINGER-VERLAG BERLIN HEIDELBERG NEW YORK

Please order through your bookseller:
or Springer-Verlag, P.O. Box 105280, D-6900 Heidelberg,
All countries (except North America)
or (North America) Springer-Verlag New York Inc.,
175 Fifth Avenue, New York, NY 10010, USA
North America subscriptions are entered with prepayment only.

☐ Please enter my/our subscription to (please give title or ISSN)

_____

Full subscription information is given on inside
front or back cover page

Name: _____

Address: _____

_____

Date/Signature

☐ This is a new order   ☐ This is a renewal order

Please send a sample copy and/or latest index/sample copy
including volume-index (supply is limited):

_____

_____

_____

Please send information concerning
☐ Back volumes   ☐ microform editions   ☐ journals catalog

To: **The Head Librarian/The Library Committee**

Postcard - Airmail

To the bookseller

Texts and Monographs in Physics

Editors: W. Beiglböck, M. Goldhaber, E. H. Lieb, W. Thirring

New and forthcoming volumes:

A. BÖHM

Quantum Mechanics

1979. Approx. 320 pages.
Cloth DM 58,—; US $31.90 ISBN 3-540-08862-8

The whole range of quantum mechanics, from funda-
mental assumptions to the experimental numbers, in its
general algebraic form is presented in this book. The
rigged Hilbert space is used enabling discrete and
continuous spectra to be treated from the same point
of view.

O. BRATELLI, D. W. ROBINSON

**Operator Algebras and
Quantum Statistical Mechanics**

Volume 1
The Mathematical Theory of C*- and W*-Algebras
1979. ISBN 3-540-09187-4 In preparation

Here is the first really thorough and consistently devel-
oped presentation in two volumes of the applications
of operator algebra theory to statistical physics.
Volume one is a self-contained exposition of the
mathematical theory of C^*- and W^*-algebras. The
authors choose an approach particularly useful from
the physicist's point of view, and all proofs are
worked out in detail, making the book an excellent
advanced text in mathematics and the first textbook
in this field.

H. PILKUHN

Relativistic Particle Physics

1979. Approx. 400 pages.
ISBN 3-540-09348-6 In preparation

This textbook on relativistic quantum physics presents
relativistic one- and two-body equations, quantum
electrodynamics, weak and strong interactions and
their applications to particle physics, atomic and
nuclear physics. The book includes the Salam-Wein-
berg model and charmed particles.

R. D. RICHTMYER

**Principles of
Advanced Mathematical Physics I**

1978. 45 figures. XV, 422 pages.
Cloth DM 44,—; US $24.20 ISBN 3-540-08873-3

This first volume (of two) presents the foundations of
functional analysis: Hilbert and Banach spaces and
distributions. The book covers all the mathematics
needed to understand modern physics and should take
a place with some of its famous predecessors as an
invaluable text for the graduate student in advanced
mathematical analysis.

R. M. SANTILLI

Foundations of Theoretical Mechanics I:
The Inverse Problem in Newtonian Mechanics
1978. 5 figures. IX, 266 pages.
Cloth DM 65,—; US $35.80 ISBN 3-540-08874-1

R. M. Santilli's *Foundations of Theoretical Mechanics*
will be one of the most complete texts ever written on
the methodological foundations of mechanics laid
down by Lagrange, Hamilton and others.

M. D. SCADRON

**Advanced Quantum Theory and Its
Applications through Feynman Diagrams**

1979. 78 figures. Approx. 300 pages.
Cloth DM 79,—; US $43.50 ISBN 3-540-09045-2

Here is a concise, yet comprehensive text on the basic
techniques used in theoretical elementary particle
physics.
The work provides a natural introduction to their use
and increases the student's understanding of the
natural forces by reducing them to their simplest and
most general terms.

Previously published:

J. KESSLER

Polarized Electrons

1976. 104 figures. IX, 223 pages.
Cloth DM 65,—; US $35.80 ISBN 3-540-07678-6

W. RINDLER

Essential Relativity

Second Edition 1977
Cloth DM 67,70; US $37.30 ISBN 3-540-07970-X

K. CHADAN, P. C. SABATIER

**Inverse Problems in
Quantum Scattering Theory**

1977. Cloth DM 67,70; US $37.30
ISBN 3-540-08092-9

J. M. JAUCH, F. ROHRLICH

The Theory of Photons and Electrons

Second Expanded Edition 1976
Cloth DM 45,—; US $24.80 ISBN 3-540-07295-0

C. TRUESDELL, S. BHARATHA

**The Concepts and Logic of Classical
Thermodynamics as a Theory of Heat Engines**

Rigorously Constructed upon the Foundation
Laid by S. Carnot and F. Reech
1977. Cloth DM 56,30; US $31.00
ISBN 3-540-07971-8

Prices are subject to change without notice

Springer-Verlag
Berlin
Heidelberg
New York

Communications in
Mathematical
Physics