

Instructions to Authors

Communications in Mathematical Physics

The instructions should be read carefully before preparing the manuscript.

A. General

Papers submitted for publication should preferably be written in English.

A **summary** for *Zentralblatt für Mathematik* should be attached. Manuscripts (**in duplicate**) must be in their final form and typed on one side of the paper only in double-line spacing with wide margins. The author should also keep a copy of the manuscript. An **abstract** must be included. Normally, only printer's errors should be corrected in the proofs. A **charge** is made for **extensive changes** not due to typesetting errors, introduced at the proof stage.

Formulae should be typewritten whenever possible.

Special markings should be explained in a "Note to the printer" (see suggestions in section B). Copies produced by matrix printer are not accepted unless clearly legible.

Illustrations and diagrams should be submitted on separate sheets and not included in the text. They should either be good-quality prints in the desired final size (inscriptions 2 mm high are recommended) or be drawn about twice the final size in India ink using clean uniform lines. Computer drawings are acceptable provided they are of comparable quality to line drawings. Computer-drawn curves and lines must be smooth. In the latter case, letters and numbers should be about 4 mm high to allow for 50% reduction. The publisher reserves the right to reduce or enlarge illustrations and diagrams. The author should indicate in the margin of the manuscript where illustrations and diagrams are to be inserted.

Footnotes, other than those referring to the title of the paper, should be avoided. If absolutely necessary, they should be numbered consecutively and placed at the foot of the page on which they occur (not at the end of the article).

On the first page of the manuscript a short **running title** should be provided (not to exceed 70 typewriter strokes, including spaces).

The **list of references** at the end of the paper should always be in alphabetical order and include the names and initials of all authors (see examples below). Names of journals and book series should be abbreviated in accordance with *Zentralblatt für Mathematik*. Whenever possible, please replace all references to papers accepted

for publication, preprints or technical reports by the exact name of the journal, as well as the volume, first and last page numbers and year, if the article has already been published or accepted for publication.

When styling the references, the following examples should be observed:

Journal article:

1. or [T-Y] Tomboulis, E., Yaffe, L.: Finite temperature $SU(2)$ lattice gauge theory. *Commun. Math. Phys.* **100**, 313–341 (1985)

Complete book:

2. or [B-R] Bratelli, O., Robinson, D.W.: Operator algebras and quantum statistical mechanics, Vol II. Berlin, Heidelberg, New York: Springer 1981

Single contribution in a book:

3. or [G] Gromov, M.: Large Riemannian manifolds. In: Shiohama, K., Sakai, T., Sunada, T. (eds.) *Curvature and topology of Riemannian manifolds. Proceedings, Katata 1985. Lecture Notes Mathematics, Vol. 1201*, pp. 108–121. Berlin, Heidelberg, New York: Springer 1986

Citations in the text should be either (a) by numbers in square brackets, e. g., [1], or Bombieri and Giusti [1], referring to an alphabetically ordered and numbered list, or (b) by the author's initials in square brackets, e. g., [B-G], or (c) by author and year in parentheses, e. g., Bombieri and Giusti (1971). Any one of these styles is acceptable if used *consistently* throughout the paper. In the third system, if there are two authors, both should be named, e. g., Agar and Douglas (1955); if a work with more than two authors is cited, only the first author's name plus "et al." need be given; e. g., Komor et al. (1979); if there is more than one reference by the same author or team of authors in the same year, then a, b, c, etc. should be added after the year both in the text and in the list of references.

One hundred (100) **offprints** of each paper will be supplied free of charge. Additional offprints are available in lots of 100, provided the order form is received with the corrected proof.

B. Color coding

Manuscripts must be marked according to the following rules unless produced on a golfball/daisy typewriter or on a good-quality printer and the desired fonts (Greek, script, special roman, boldface, etc.) are clearly recognizable. Special letters or symbols should be explained in a "Note to the printer". Unmarked manuscripts may have to be returned to the authors, which may cause a delay in publication.

1. Text

Manuscripts produced by computer typesetting with a daisy wheel or laser printer, or by manual typing with special fonts require marking only of special symbols, and distinguishing between 0 and O, 0 and o, and 1 and l. Special letters or symbols should be explained in a "Note to the Printer." In other cases the following instructions should be followed.

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 end of which should be clearly indicated. The words "Proof", "Remark", "Example", "Note" etc. are printed in *italics* with the formulation in ordinary (roman) typeface, and **Definition** in boldface. The text of the definition itself should be in roman except for the concept defined, which should be in *italics*. Words or sentences to be set in italics should be marked by single underlining. If the material underlined in the manuscript is to be typeset with underlining (and not set in italics), this must be explained to the printer.

2. Formulae

Letters in formulae are printed in *italics* and figures in roman, if not marked otherwise. It will help the printer if in doubtful cases the position of indices and exponents is marked thus: h_{β}^{α} , a^{\forall} . 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:

Violet: Letters in formulae (l, O, o) to be distinguished from numerals (1, 0)
 Brown: boldface (headings, boldface letters in formulae)
 Yellow: roman (abbreviations e. g. Re, Im, log, sin, ord, id, lim, sup, etc.)
 Red: Greek
 Green: script
 Orange: special roman
 Blue: Gothic
 Encircled: sanserif

The following are frequently confused and should be made unambiguous:

$\cup, U, \bigcup, U; \circ, o, O, 0; \times, x, X, \chi, \kappa; \vee, v, v;$
 $\theta, \Theta, \phi, \varphi, \Phi, \varnothing, \emptyset; \psi, \Psi; \varepsilon, \epsilon;$
 a', a^1 ; the symbol *a* and the indefinite article *a*;

also the handwritten letters:

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

Please take care to distinguish these capital letters by double underlining.

C. Examples

1. Special alphabets or typefaces

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**

Greek $\Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Phi, \Psi, \Omega$
 $\alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu,$
 $\nu, \xi, \omicron, \pi, \rho, \sigma, \tau, \upsilon, \varphi, \phi, \chi, \psi, \omega$

Script *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

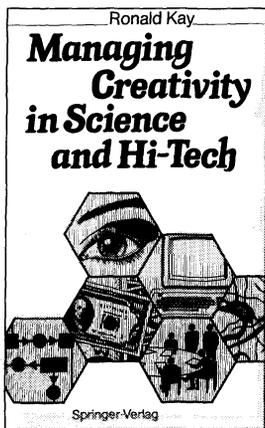
Special roman **A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, 1**

Gothic **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**
 $a, b, c, d, e, f, g, h, i, j, k, l, m, n,$
 $o, p, q, r, s, t, u, v, w, x, y, z$

Final check:

- All formula characters unambiguous?
- Information on title page complete (title, name(s) of author(s), institute(s), complete address(es)?)
- All figures enclosed?
- References complete and cross-checked?
- Text and end of theorems, lemmas etc. marked?
- Short running title given?
- Summary for *Zentralblatt für Mathematik* enclosed?



1990. XV, 221 pp.
 Hardcover DM 49,-
 ISBN 3-540-51375-2

A guide for ambitious professionals

From the reviews:

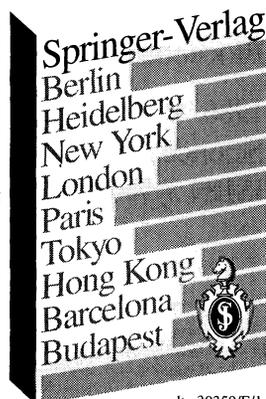
"This is one of those books that you cannot put down once you have started to look in it. It is a book that I wish had been available many years ago when, as a young newly appointed scientific manager, I was struggling with a mass of new ideas, rules, procedures, etc.: it would have saved me (and, no doubt, some of those I was managing) a great many headaches.

... **Managing Creativity in Science and High-Tech** bears proof of his (i.e. Kay's) vast experience in managing scientific and technological research and development. Many of his ideas will cause not a few eyebrows to be raised: 'Employees have a right to know where they stand'; 'In the world of hi-tech, women are underrepresented'; 'The need for praise and recognition is never fully satisfied'; 'Don't compete with the people you manage'.

Some other findings in the book might with advantage be adopted by many an organisation: 'Bureaucracy is the antithesis of creativity. In a hi-tech environment where creativity is to be nurtured, introduction or change of any administrative procedure should be subject to line management concurrence' and 'Be adamant in rejection of procedures that are defended purely on the basis of their long-lived existence. Creativity can only flourish in an environment that allows for change'.

The book is an absolute must for all engaged in the hi-tech industry, university and government laboratories, and engineers and scientists in, or moving to, administrative positions."

Elektor Electronics



- Heidelberger Platz 3, W-1000 Berlin 33, F.R. Germany
 175 Fifth Ave., New York, NY 10010, USA
 8 Alexandra Rd., London SW 19 7JZ, England
 26, rue des Carmes, F-75005 Paris, France
 37-3, Hongo 3-chome, Bunkyo-ku, Tokyo 113, Japan
 Room 701, Mirror Tower, 61 Mody Road, Tsimshatsui, Kowloon, Hong Kong
 Avinguda Diagonal, 468-4° C, E-08006 Barcelona, Spain
 Wesselényi u. 28, H-1075 Budapest, Hungary

dtp.30359/E/1

R. Seroul, S. Levy

A Beginner's Book of T_EX

Translated from the French by S. Levy

1991. XII, 282 pp. Softcover DM 58,- ISBN 3-540-97562-4

This book is a friendly introduction to T_EX, the powerful typesetting system designed by Don Knuth. It is addressed primarily to beginners, but it contains much information that will be useful to aspiring T_EX “wizards”. Moreover, the authors kept firmly in mind the diversity of backgrounds that characterizes T_EX users: authors in the sciences and in the humanities, secretaries, technical typists . . .

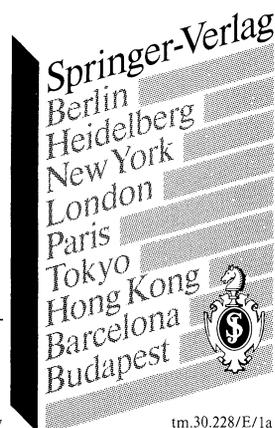
The book contains a careful explanation of all fundamental concepts and commands, but also a wealth of commented examples and “tricks” based on the authors’ long experience with T_EX. The attentive reader will quickly be able to create a table, or customize the appearance of the page, or code even the most complicated formula. The last third of the book is devoted to a Dictionary/Index, summarizing all the material in the text and going into greater depth in many areas.

J. Désarménien (Ed.)

T_EX for Scientific Documentation

Second European Conference
Strasbourg, France, June 19–21, 1986
Proceedings

1986. VI, 204 pp. (Lecture Notes in Computer
Science, Vol. 236) Softcover DM 36,-
ISBN 3-540-16807-9



-
- Heidelberger Platz 3, W-1000 Berlin 33, F.R. Germany
 - 175 Fifth Ave., New York, NY 10010, USA
 - 8 Alexandra Rd., London SW19 7JZ, England
 - 26, rue des Carmes, F-75005 Paris, France
 - 37-3, Hongo 3-chome, Bunkyo-ku, Tokyo 113, Japan
 - Room 701, Mirror Tower, 61 Mody Road, Tsimshatsui, Kowloon, Hong Kong
 - Avinguda Diagonal, 468-4^oC, E-08006 Barcelona, Spain
 - Wesselényi u 28, H-1075 Budapest, Hungary

tm.30.228/E/1a

Acta Informatica

Archive for
Mathematical Logic

Communications in
Mathematical Physics

Economic Theory
Inventiones mathematicae

Journal of
Mathematical Biology

Mathematische Annalen
Mathematische Zeitschrift

Numerische Mathematik
Probability Theory
and Related Fields

Theoretica Chimica Acta
Acta Informatica

Archive for
Mathematical Logic

Communications in
Mathematical Physics

Economic Theory
Inventiones mathematicae

Journal of
Mathematical Biology

Mathematische Annalen
Mathematische Zeitschrift

Mathematische Zeitschrift

T_EX users do it with Springer macros

If you are used to preparing your manuscripts with plain-T_EX, you may be interested to hear that we have created a macro package for the layout of the journals listed here.

Articles may now be submitted as plain-T_EX files using our macros. They will be phototypeset directly from your T_EX-file, thus cutting down proofreading and publishing times.

The macros plus AMS fonts are available on 3.5" DOS diskettes and are free of charge.

Please order your copy by writing to



Springer-Verlag
Journal Production
Post Box 10 52 80
W-6900 Heidelberg, FRG

e-mail: texmacros@dhdspri6

**Please do not forget to indicate
the journal for which you are
preparing your manuscript.**

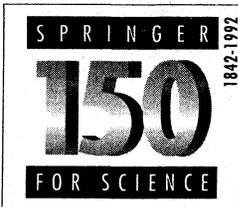
L^AT_EX stylefiles are in preparation.

Communications in Mathematical Physics

Chief Editor A. Jaffe, Cambridge, MA

Editorial Board M. Aizenman, Princeton, NJ
H. Araki, Kyoto
A. Connes, Bures-sur-Yvette
J.-P. Eckmann, Genève
M. E. Fisher, College Park, MD
J. Fröhlich, Zürich
K. Gawedzki, Bures-sur-Yvette
M. Herman, Palaiseau
J. L. Lebowitz, New Brunswick, NJ
N. Yu. Reshetikhin, Berkeley, CA
B. Simon, Pasadena, CA
Ya. G. Sinai, Moscow
T. Spencer, Princeton, NJ
S.-T. Yau, Taiwan

Advisory Board M. F. Atiyah, Oxford
F. Hirzebruch, Bonn
G. 't Hooft, Utrecht
R. Schrieffer, Santa Barbara, CA
I. Singer, Cambridge, MA
C. N. Yang, Stony Brook, NY



Responsible for Advertisements
Springer-Verlag
Printers
Printed in Germany

E. Lückermann, M. Stresow, Heidelberger Platz 3, 1000 Berlin 33, FRG
Telephone: (030) 8207-1, Telex 01-85411, FAX (0)30/820 7300
Berlin Heidelberg New York Tokyo Hong Kong Barcelona Budapest
Brühlsche Universitätsdruckerei, Giessen
© Springer-Verlag Berlin Heidelberg 1992
Springer-Verlag GmbH & Co KG, 1000 Berlin 33, Federal Republic of Germany