INSTRUCTIONS TO AUTHORS

A. General

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 × 1/4). 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


Commun. math. Phys. 57 (3) 1977
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:
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
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:
\( u, u, (u, u); o, o, O, 0; x, x, \Lambda, \gamma; \psi, \Psi; \varepsilon, \varepsilon; a', a \)
also the handwritten Roman letters:
\( c, C; e, l; i, J; k, K; o, O; p, P; s, S; \cdot u, U; v, V; w, W; x, X; z, Z; \)
Please take care to distinguish them in some way.

C. Examples
1. Special alphabets or typefaces
Script \( \mathcal{A}, \mathcal{B}, \mathcal{C}, \mathcal{D}, \mathcal{E}, \mathcal{F}, \mathcal{G}, \mathcal{H}, \mathcal{I}, \mathcal{J}, \mathcal{K}, \mathcal{L}, \mathcal{M}, \mathcal{N}, \mathcal{O}, \mathcal{P}, \mathcal{Q}, \mathcal{R}, \mathcal{S}, \mathcal{T}, \mathcal{U}, \mathcal{V}, \mathcal{W}, \mathcal{X}, \mathcal{Y}, \mathcal{Z} \)
Sanserif \( a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z \)
Gothic \( \mathfrak{A}, \mathfrak{B}, \mathfrak{C}, \mathfrak{D}, \mathfrak{E}, \mathfrak{F}, \mathfrak{G}, \mathfrak{H}, \mathfrak{I}, \mathfrak{J}, \mathfrak{K}, \mathfrak{L}, \mathfrak{M}, \mathfrak{N}, \mathfrak{O}, \mathfrak{P}, \mathfrak{Q}, \mathfrak{R}, \mathfrak{S}, \mathfrak{T}, \mathfrak{U}, \mathfrak{V}, \mathfrak{W}, \mathfrak{X}, \mathfrak{Y}, \mathfrak{Z} \)
Boldface \( \mathbf{A}, \mathbf{B}, \mathbf{C}, \mathbf{D}, \mathbf{E}, \mathbf{F}, \mathbf{G}, \mathbf{H}, \mathbf{I}, \mathbf{J}, \mathbf{K}, \mathbf{L}, \mathbf{M}, \mathbf{N}, \mathbf{O}, \mathbf{P}, \mathbf{Q}, \mathbf{R}, \mathbf{S}, \mathbf{T}, \mathbf{U}, \mathbf{V}, \mathbf{W}, \mathbf{X}, \mathbf{Y}, \mathbf{Z} \)
Special Roman \( \mathcal{A}, \mathcal{B}, \mathcal{C}, \mathcal{D}, \mathcal{E}, \mathcal{F}, \mathcal{G}, \mathcal{H}, \mathcal{I}, \mathcal{J}, \mathcal{K}, \mathcal{L}, \mathcal{M}, \mathcal{N}, \mathcal{O}, \mathcal{P}, \mathcal{Q}, \mathcal{R}, \mathcal{S}, \mathcal{T}, \mathcal{U}, \mathcal{V}, \mathcal{W}, \mathcal{X}, \mathcal{Y}, \mathcal{Z}, \mathcal{I} \)
Greek \( \Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Phi, \Psi, \Omega \)

2. Notations
preferred form instead of
\( A^*, b^2, \gamma, v, v \) \( \tilde{A}, \tilde{b}, \tilde{\gamma}, \tilde{v} \)
lim sup, lim inf \( \lim \) \( \lim \)
\( \text{inj} \), \( \text{proj} \) lim \( \lim \) \( \lim \)
\( \exp \left( -(x^2 + y^2)/a^2 \right) \) \( e \) \( e \)
\( f^{-1} \) \( f \) \( f \)

preferred form instead of
\( f: A \rightarrow B \) \( A \rightarrow B \)
\( \frac{\cos(1/x)}{(a+b/x)^{1/2}} \) \( \frac{1}{x} \)
\( \sqrt{\frac{a+b}{x}} \) \( \frac{\sqrt{a+b}}{x} \)

Commun. math. Phys. 57 (3) 1977
There was a golden time when the small German town of Göttingen was for mathematicians what Paris was for artists, and nineteen-year-old Richard Courant fell immediately under its spell. He became a well-known mathematician, teacher, writer and editor, organizer and administrator; but everything he did professionally was always influenced by his youthful experience in Göttingen. He also put his own highly individual stamp on the scientific tradition which it represented for him. When, in 1933, he was dismissed by the Nazis from his position as director of the internationally famous Mathematics Institute of Göttingen, he emigrated to the United States and devoted himself to creating in that country a stimulating scientific center such as the one he had known in his youth in Göttingen. Today, the Courant Institute of Mathematical Sciences in New York City is a visible symbol of the success of his efforts.

Constance Reid, the author of a well received biography of Hilbert, had a number of conversations with Richard Courant, then Professor Emeritus at the Mathematics Department of New York University, prior to his death in 1972. These conversations, his letters, diaries, and testimonies from many of Courant’s friends and colleagues form the basis for Courant In Göttingen and New York.

Springer Books by Courant:
R. Courant: Dirichlet’s Principle, Conformal Mapping, and Minimal Surfaces
With an Appendix by M. Schiffer
R. Courant: Vorlesungen über Differential- und Integralrechnung
Band 1: Funktionen einer Veränderlichen
Band 2: Funktionen mehrerer Veränderlicher
R. Courant, K.O. Friedrichs: Supersonic Flow and Shock Waves
(Applied Mathematical Sciences, Vol. 21)
R. Courant, D. Hilbert: Methoden der Mathematischen Physik 1
(Heidelberger Taschenbücher, Band 30)
R. Courant, D. Hilbert: Methoden der Mathematischen Physik 2
(Heidelberger Taschenbücher, Band 31)
R. Courant, H. Robbins: Was ist Mathematik?