## 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  $\times \frac{1}{2}$ ). 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

#### 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: Spacing of indices and exponents must be specially indicated  $(A_{m}^{n})^{m}$  otherwise bγ, aŸ. 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:

(abbreviations e.g. Re, Im, log, sin, ord, id, lim, sup, etc.)

red: Greek blue:

green:

Gothic 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:

$$\cup$$
,  $U$ ,  $\bigcup$ ,  $U$ ;  $\circ$ ,  $o$ ,  $O$ ,  $O$ ;

$$o, O, 0; \quad \times, x, X, \kappa; \quad \vee, v, v;$$

$$\theta, \Theta, \phi, \varphi, \Phi, \emptyset; \quad \psi, \Psi; \qquad \varepsilon, \epsilon;$$

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

also the handwritten Roman letters:

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

Please take care to distinguish them in some way.

## C. Examples

#### 1. Special alphabets or typefaces

 $\mathscr{A},\,\mathscr{B},\,\mathscr{C},\,\mathscr{D},\,\mathscr{E},\,\mathscr{F},\,\mathscr{G},\,\mathscr{H},\,\mathscr{I},\,\mathscr{J},\,\mathscr{K},\,\mathscr{L},\,\mathscr{M},\,\mathscr{N},\,0,\,\mathscr{P},\,2,\,\mathscr{R},\,\mathscr{S},\,\mathscr{T},\,\mathscr{U},\,\mathscr{V},\,\mathscr{W},\,\mathscr{X},\,\mathscr{Y},\,\mathscr{Z}$ 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, x

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

U, B, C, D, E, F, G, S, I, I, R, L, M, N, D, P, D, R, E, I, U, V, W, X, Y, J

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

A, B, C, ID, E, IF, G, IH, II, J, IK, IL, M, N, O, IP, Q, R, S, T, U, V, W, X, Y, Z, 1 Special Roman

Greek  $\Gamma$ ,  $\Delta$ ,  $\Theta$ ,  $\Lambda$ ,  $\Xi$ ,  $\Pi$ ,  $\Sigma$ ,  $\Phi$ ,  $\Psi$ ,  $\Omega$ 

 $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$ ,  $\varepsilon$ ,  $\zeta$ ,  $\eta$ ,  $\theta$ ,  $\theta$ ,  $\iota$ ,  $\kappa$ ,  $\lambda$ ,  $\mu$ ,  $\nu$ ,  $\zeta$ ,  $\rho$ ,  $\pi$ ,  $\rho$ ,  $\sigma$ ,  $\tau$ ,  $\nu$ ,  $\varphi$ ,  $\varphi$ ,  $\chi$ ,  $\psi$ ,  $\omega$ 

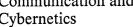
### 2. Notations

Gothic

preferred form	instead of	preferred form	instead of
$A^*, \tilde{b}, \gamma', v, v$	$ar{A}, \hat{b}, reve{\gamma}, reve{v}$	$f: A \rightarrow B$	$A \xrightarrow{f} B$
lim sup, lim inf	lim, lim		•
inj lim, proj lim	lim, lim	$\cos(1/x)$	$\cos\frac{1}{x}$
$\exp\left(-(x^2+v^2)/a^2\right)$	$e^{-\frac{x^2+y^2}{a^2}}$	$\frac{cos(a/n)}{(a+b/x)^{1/2}}$	$\frac{1}{\sqrt{1+b}}$
$f^{-1}$	$\overline{f}^1$		$V^{a+\frac{1}{x}}$

# Communication and Cybernetics

Editors: W. D. Keidel, H. Wolter





Springer-Verlag Berlin Heidelberg New York

# Facts and Models in Hearing

Proceedings of the Symposium on Psychophysical Models and Physiological Facts in Hearing, held at Tutzing, Oberbayern, Federal Republic of Germany, April 22-26, 1974. Editors: E. Zwicker, E. Terhardt

176 figures. XI, 360 pages. 1974. (Vol. 8) Cloth DM 43,—; US \$17.70 ISBN 3-540-06826-0

Subjects dealt with include scientific problems of hearing, in particular the structure of the cochlea, the mechanicalto-neural transducing mechanism, auditory frequency and time analysis, nonlinear effects, and the central processing of sound. Comments of general interest, made in the discussion, have been added to various papers.

# G. Hammarström: Linguistic Units and Items

17 figures. IX, 131 pages. 1976. (Vol. 9) Cloth DM 38,—; US \$15.60 ISBN 3-540-07241-1

This book contains substantial further developments in relation to the units (abstractions) and items (concrete examples) described in the author's previous book 'Linguistische Einheiten im Rahmen der modernen Sprachwissenschaft'. Basic ideas of traditional and structural linguistics are developed to a greater extent than in any previous work.

# **Digital Pattern Recognition**

Editor: K. S. Fu

With contributions by T. M. Cover, E. Diday, K. S. Fu, A. Rosenfeld, J.-C. Simon, T. J. Wagner, J. S. Weszka, J. J. Wolf

54 figures. XI, 206 pages. 1976. (Vol. 10) Cloth DM 79,80; US \$32.80 ISBN 3-540-07511-9

This book provides an overview of recent advances in the area of pattern recognition. Theoretical topics covered include statistical pattern recognition, cluster analysis, and syntactic pattern recognition. Application-oriented topics discussed include picture recognition, and speech recognition and understanding.

# **Structure and Process in Speech Perception**

Proceedings of the 'Symposium on Dynamic Aspects of Speech Perception' Held at I.O.P. Eindhoven, The Netherlands, August 4-6, 1975. Editors: A. Cohen, S. G. Nooteboom

62 figures. 21 tables. X, 353 pages. 1975. (Vol. 11) ISBN 3-540-07520-8 Cloth DM 48,—; US \$19.70

In the past most research in the perception of speech has been devoted to studying single, optimally pronounced, phonemes, syllables and words. In recent years attention has been shifted to the the ongoing processes by which the semicontinuous acoustic speech signal is interpreted in terms of discrete syntactic and semantic structures. This proceedings volume contains a number of invited papers given to an international symposium.

Prices are subject to change without notice

# Mathematical Physics

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