

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

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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_{\uparrow} , a_{\downarrow} . Spacing of indices and exponents must be specially indicated (A_m^n) otherwise they will be set (A_m^n).

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 <i>l</i> and the capital letter <i>O</i>)

The following are frequently confused:

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

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

also the handwritten Roman 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 them in some way.

C. Examples

1. Special alphabets or typefaces

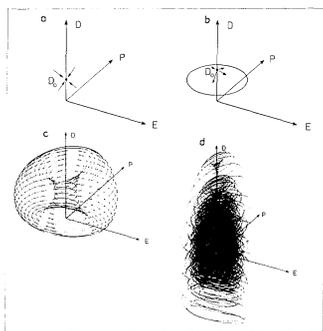
Script	<i>A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z</i> <i>a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z</i>
Sanserif	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z
Gothic	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
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	A, IB, C, ID, IE, IF, G, IH, II, J, IK, IL, M, N, O, IP, Q, IR, S, IT, U, V, W, X, Y, Z, 1
Greek	$\Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Phi, \Psi, \Omega$ $\alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, \omicron, \pi, \rho, \sigma, \tau, \upsilon, \varphi, \chi, \psi, \omega$

2. Notations

preferred form	instead of	preferred form	instead of
$A^*, \tilde{b}, \gamma', \nu$	$\bar{A}, \hat{b}, \tilde{\gamma}, \tilde{\nu}$	$f: A \rightarrow B$	$A \xrightarrow{f} B$
lim sup, lim inf	$\overline{\lim}, \underline{\lim}$		
inj lim, proj lim	$\overleftarrow{\lim}, \overrightarrow{\lim}$		
$\exp(-(x^2 + y^2)/a^2)$	$e^{-\frac{x^2 + y^2}{a^2}}$	$\frac{\cos(1/x)}{(a + b/x)^{1/2}}$	$\frac{\cos \frac{1}{x}}{\sqrt{a + \frac{b}{x}}}$
f^{-1}	f^{-1}		

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Bifurcation hierarchy of the laser in the frame of the unreduced equations. (a) Stable focus, no laser action; (b) limit cycle, laser action; (c) torus, laser pulses; (d) chaos, laser turbulence

Dynamics of Synergetic Systems

Proceedings of the International Symposium on Synergetics, Bielefeld, Fed. Rep. of Germany, September 24-29, 1979

Editor: H. HAKEN

1980. 146 figs., some in color, 2 tab. Approx. 290 pages. Cloth DM 68,-; approx. US \$40.20 ISBN 3-540-09918-2

Synergetic systems are those which, being composed of many elements, can produce macroscopic spatial, temporal or functional structures in a self-organized way. These proceedings draw a coherent picture of the present status of synergetics.

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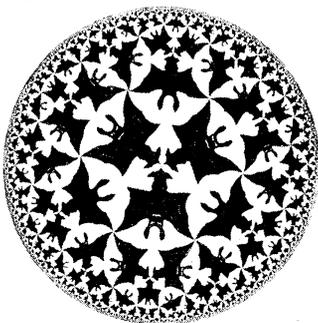
Pattern Formation by Dynamic Systems and Pattern Recognition

Proceedings of the International Symposium on Synergetics at Schloß Elmau, Bavaria, April 30- May 5, 1979

Editor: H. HAKEN

1979. 156 figs., 16 tab. VIII, 305 pages. Cloth DM 68,-; approx. US \$40.20 ISBN 3-540-09770-8

A unifying account of self-organized formation of patterns by dynamic systems and of modern methods of pattern recognition by machines is presented here for the first time. Experts in the fields of laser physics and quantum optics, fluid dynamics, astrophysics, morphogenesis, neural networks, chemical systems, mathematics, history, and other disciplines give a detailed account of recent experimental and theoretical results on pattern formation. Leading scientists in the field of pattern recognition report on basic principles and on their most recent research on practical applications. The book shows profound, hitherto unnoticed links between pattern formation and pattern recognition. These two fields will profit appreciably from the future research this book is sure to inspire.



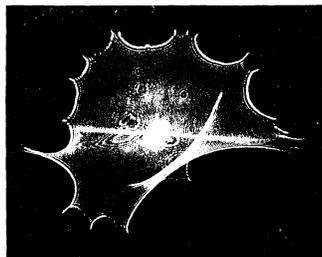
Angels or devils? (Drawing by Escher)

Structural Stability in Physics

Proceedings of Two International Symposia on Applications of Catastrophe Theory and Topological Concepts in Physics Tübingen, Fed. Rep. of Germany, May 2-6 and December 11-14, 1978

Editors: W. GÜTINGER, H. EIKEMEIER

1979. 108 figs., 8 tab. VIII, 311 pages. Cloth DM 69,-; approx. US \$40.80 ISBN 3-540-09463-6



Caustics formed in the far field by a broadened laser beam incident on a water drop 'lens'.

These contributions discuss recent applications to physical systems of topological concepts derived from structural stability. Catastrophe and singularity theory play a central role. The diverse physical systems considered exhibit analogous behavior on various scales. Owing to the broad scope of this rapidly expanding field, the papers cover a wide spectrum, ranging from fractal regimes and optical diffraction catastrophes to solitons in physics, chaos, and applications of catastrophe theory in biophysics and pattern recognition.

Communications in
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