

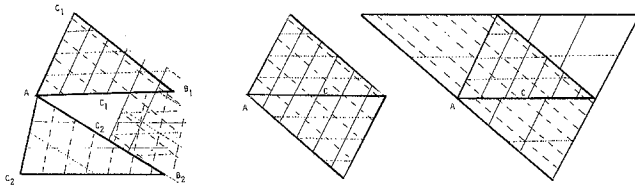
Number Theory

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Number Theory and Physics

Proceedings of the Winter School, Les Houches, France,
March 7-16, 1989

1990. XIII, 311 pp. 45 figs. (Springer Proceedings in Physics,
Vol. 47) Hardcover DM 99,- ISBN 3-540-52129-1



The contributions to this book can be divided into two categories: those in which mathematicians write on problems relevant to theoretical physics, and those dealing with problems relevant to number theory, written by physicists.

The subjects covered include: modular forms and applications to quantum field theory for strings, number theoretical aspects of the spectra of operators applied to the Hall effect, quasicrystals, almost periodic systems, the Riemann zeta function, applications of number theory to dynamical systems, statistical mechanics, lattices, stochastic processes and integrable systems.

M. Schroeder, University of Göttingen

Number Theory in Science and Communication

With Applications in Cryptography, Physics, Digital Information, Computing, and Self-Similarity

2nd enl. ed. 1986 Corr. printing 1990. XIX, 374 pp. 81 figs.
(Springer Series in Information Sciences, Vol. 7)
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Contents: A Few Fundamentals. - Some Simple Applications. - Congruences and the Like. - Cryptography and Divisors. - Residues and Diffraction. - Chinese and Other Fast Algorithms. - Pseudoprimes, Möbius Transform, and Partitions. - Cyclotomy and Polynomials. - Galois Fields and More Applications. - Self-Similarity, Fractals and Art. - Appendix. - Glossary of Symbols. - References. - Name Index. - Subject Index.

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