

of integrable functions by using the idea of truncation of a function by another function. The notion of measure follows naturally. Stone's theorem relating measure and integration is proved. In Chapter 9 Lebesgue—Stieltjes integrals are defined as Daniell integrals on spaces  $L^1(R^*)$ , which contain all the step functions (or equivalently all the continuous functions on  $R^*$  which vanish outside a compact set). Various forms of Riesz's Representation Theorem for bounded linear functionals on the space of continuous functions on a compact topological space provide the subject matter of Chapter 10. In Chapter 11 the general notion of measure is introduced, the extension of a measure on a ring to a measure on a  $\sigma$ -algebra is done by means of the Daniell integral. Chapter 12 contains a classical approach of the problem of integration with respect to a measure on a  $\sigma$ -algebra. Chapter 13 is devoted to the study of uniqueness of extensions of measures in the case where the universal space is  $\sigma$ -finite with respect to the measure. In Chapter 14 product measures are defined as extensions of a measure on elementary product sets to a measure on a  $\sigma$ -algebra. Chapter 16 introduces the notions of real and complex measures. The Jordan Decomposition Theorem shows the connection between positive and real or complex measures. In Chapter 17 the Radon—Nikodým theorem is proved both in measure theoretic form and for Daniell integrals, and used for a study of dual spaces of  $L^p$  spaces. A short Appendix gives a summary of the most important topological notions used in the text. All the chapters end with exercises; the solutions can be found at the end of the book.

An elementary knowledge of topological spaces is assumed. The book is offered for students.

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## Livres reçus par la rédaction

- A. Baker—D. W. Masser (editors), **Transcendence theory: Advances and applications**. Proceedings of a conference held in Cambridge in 1976, X+236 pages, London—New York—San Francisco, Academic Press, 1977. — £ 11.00.
- M. S. Bartlett, **An introduction to stochastic processes with special reference to methods and applications**, Third edition, XVII+388 pages, Cambridge University Press, 1977. — £ 12.50.
- N. L. Biggs, **Interaction models** (London Mathematical Society Lecture Note Series, 30), VI+101 pages, Cambridge University Press, 1977. — £ 4.50.
- B. Boos, **Topologie und Analysis. Einführung in die Atiyah—Singer—Indexformel** (Hochschultext), XVI+352 Seiten, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 38,—.
- Complex analysis and algebraic geometry**. A collection of papers dedicated to K. Kodaira. Edited by W. L. Baily, Jr. and T. Shioda, XII+401 pages, Cambridge University Press, 1977. — £ 28.00.
- R. H. Crowell—R. H. Fox, **Introduction to knot theory** (Graduate Texts in Mathematics, Vol. 57), X+182 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 27,90.
- Á. Császár, **General topology** (Disquisitiones Mathematicae Hungaricae, 9), 488 pages, Budapest, Akadémiai Kiadó, 1977.
- W. Felscher, **Naive Mengen und abstrakte Zahlen. I**, 260 Seiten, Mannheim—Wien—Zürich, Bibliographisches Institut, 1978.
- P. Ganssler—W. Stute, **Wahrscheinlichkeitstheorie** (Hochschultext), XII+418 Seiten, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 36,—.

- D. Gilbarg—N. S. Trudinger, Elliptic partial differential equations of second order** (Grundlehren der mathematischen Wissenschaften — A Series of Comprehensive Studies in Mathematics, 224), X+401 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 78,—.
- H. Grauert—I. Lieb, Differential- und Integralrechnung. III** (Heidelberger Taschenbücher, Bd. 43), 2., neuarb. u. erw. Auflage, XIV+210 Seiten, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 19,80.
- H. Grauert—R. Remmert, Theorie der Steinschen Räume** (Grundlehren der mathematischen Wissenschaften — A Series of Comprehensive Studies in Mathematics, 227), XX+249 Seiten, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 84,—.
- N. Koblitz,  $p$ -adic numbers,  $p$ -adic analysis, and zeta-functions** (Graduate Texts in Mathematics, Vol. 58), X+122 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 27,90.
- D. Koo, Elements of optimization. With applications in economics and business** (Heidelberg Science Library), IX+220 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 24,—.
- H. Kramer, Assembler. IV, Supplement zum Lehrprogramm** (Heidelberger Taschenbücher, 189), XI+146 Seiten, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 21,80.
- K. Kricheberg—H. Ziezold, Stochastische Methoden** (Hochschultext), VIII+201 Seiten, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 28,—.
- H. Kurzweil, Endliche Gruppen. Eine Einführung in die Theorie der endlichen Gruppen** (Hochschultext), IX+187 Seiten, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 24,—.
- J. Lamperti, Stochastic processes. A survey of the mathematical theory** (Applied Mathematical Sciences, 23), XVII+266 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 21,40.
- D. A. Marcus, Numbers fields** (Hochschultext), VIII+279 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 26,10.
- W. S. Massey, Algebraic topology: An introduction** (Graduate Texts of Mathematics, Vol. 56), XXIII+261 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 32,20.
- H. Rademacher, Lectures on elementary number theory**, IX+146 pages, Huntington—New York, R. E. Krieger Publ. Co., 1977. — \$ 9,50.
- M. Schreiber, Differential forms — A heuristic introduction** (Universitext), X+147 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 21,40.
- K. Schütte, Proof theory** (Grundlehren der mathematischen Wissenschaften — A Series of Comprehensive Studies in Mathematics, 225), translation from the German by J. N. Crossley, XII+299 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 74,—.
- J. P. Serre, Linear representations of finite groups** (Graduate Texts in Mathematics, Vol. 42), translated from the French by L. L. Scott, X+170 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 31,30.
- Topics in group theory and computation.** Proceedings of a Summer School held at College University, Galway, under the auspices of the Royal Irish Academy, from 16th to 21st August, 1973. Edited by M. P. J. Curran, XIII+118 pages, London—New York—San Francisco, Academic Press, 1977. — £ 5,80.
- N. N. Vorob'ev, Game theory.** Lectures for economists and system scientists (Applications of Mathematics, Vol. 7), translated from the Russian and supplemented by S. Kotz, XI+178 pages, Berlin—Heidelberg—New York, Springer-Verlag, 1977. — DM 38,20.