

LIVRES NOUVEAUX

Objekttyp: **Chapter**

Zeitschrift: **L'Enseignement Mathématique**

Band (Jahr): **11 (1965)**

PDF erstellt am: **28.04.2024**

Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

Tohoku Mathematical Journal. Tome 15 (1963): n° 4; tome 16 (1964); tome 17 (1965): n°s 1-2. — Sendai.

Travaux de l'Association des Mathématiciens de Moscou. Tomes 70-73, 75-76, 78-80, 83-84 (1964-65). — Moscou.

Yokohama Mathematical Journal (The). Tome 11 (1963); tome 12 (1964). — Yokohama.

Wiskundige Opgaven Met de Oplossingen. Tome 21 (1964): n° 5. — Amsterdam.

Zeitschrift für Mathematische Logik und Grundlagen der Mathematik. Tome 10 (1964); tome 11 (1965): n°s 1-3. — Berlin.

LIVRES NOUVEAUX

J. CUNNINGHAM. — **Complex variable methods in science and technology.** — Un volume $15,5 \times 23$, de 178 pages, avec figures. Prix: Cloth ed.: Sh. 45; paper ed.: Sh. 21. — D. Van Nostrand, London, 1965.

Real variable theory. — Complex numbers. — Analyticity. — Conformal transformations. — Integration. — Improper integrals. — Many-valued functions. — Beta, gamma and delta functions. — Differential equations.

G. N. POLOZHII. — **The method of summary representation for numerical solution of problems of mathematical physics.** — Translated from the Russian by G.J. Tee. — Translation edited by K.L. Stewart. — International series of monographs in pure and applied mathematics, vol. 79. — Un volume relié pleine toile, $14,5 \times 22,5$, de 283 pages. Prix: Sh. 63. — Pergamon Press, Oxford, 1965.

General theory of the one-dimensional problem of eigenvalues and eigenfunctions of discrete argument. Matrices of type II: Ordinary finite-difference equations. — General problem of eigenvalues and eigenfunctions of discrete argument. Matrices of type II. — Solution of particular boundary-value problems, and the construction of fundamental matrices in explicit form. — On special functions of discrete argument, and special matrices of type II. — *Numerical solution of two-dimensional and three-dimensional boundary-value problems of mathematical physics:* Solution of boundary-value problems for second-order elliptic differential equations with constant coefficients. — Solution of boundary-value problems for fourth-order elliptic differential equations with constant coefficients. — Formulae of summary representation for finite-difference equations, corresponding to second-order parabolic differential equations with constant coefficients. — Solution of finite-difference boundary-value problems, connected with boundary-value problems for second-order hyperbolic differential equations with constant coefficients. — Differential equation for the transverse vibrations of beams. — On the numerical solution of two-dimensional and three-dimensional boundary-value problems for differential equations with variable coefficients.

Deuxième Colloque sur l'analyse fonctionnelle tenu à Liège du 4 au 6 mai 1964. — Centre belge de recherches mathématiques. — Un volume broché, 17×25 , de 166 pages. Prix: FB 400. — Librairie Universitaire, Louvain, 1964.

L. Amerio: Solutions presque périodiques d'équations fonctionnelles dans les espaces de Hilbert. — *A. Martineau*: Equations différentielles d'ordre fini. — *K. Maurin*: General eigenfunction expansions and unitary representations of topological groups. — *A. Robertson*: Hypercomplete spaces. — *H. Schäfer*: On the role of order structures in spectral theory. — *C. Foias*: Modèles fonctionnels, liaison entre les théories de la prédiction, de la fonction caractéristique et de la dilatation unitaire. — *A. Pietsch*: Dualnukleare lokalkonvexe Räume. — *E. Magenes*: Problèmes de traces et problèmes aux limites pour équations linéaires elliptiques et paraboliques. — *L. Wälbrock*: Les semi-groupes différentiables. — *J. Leray* et *Y. Ahya*: Systèmes linéaires, hyperboliques non stricts. — *J. Leray* et *L. Wälbrock*: Norme formelle d'une fonction composée (préliminaire à l'étude des systèmes non linéaires, hyperboliques non stricts). — *L. Schwartz*: Sous-espaces hilbertiens et noyaux associés; applications aux représentations des groupes de Lie.

R. DUBISCH. — **Introduction to abstract algebra.** — Un volume relié pleine toile, $15,5 \times 23,5$, de 193 pages. Prix: Sh. 45. — John Wiley, London, 1965.

Sets. — The natural numbers. — Equivalent pairs of natural numbers. — Equivalence classes and the integers. — Integral domains. — The rational numbers. — Groups and fields. — The real numbers. — Rings, ideals, and homomorphisms. — Complex numbers and quaternions. — Vector spaces. — Polynomials.

W. E. BOYCE and R. C. DIPRIMA. — **Elementary differential equations and boundary value problems.** — Un volume relié pleine toile, $15,5 \times 23,5$, de 485 pages, avec figures. Prix: Sh. 68. — John Wiley, London, 1965.

Introduction. — First order differential equations. — Second order linear equations. — Series solutions of second order linear equations. — Higher order linear equations. — The Laplace transform. — Systems of first order equations. — Numerical methods. — Linear second order boundary value problems. — Fourier series. — Linear second order partial differential equations.

J. KLEIN et G. REEB. — **Formules commentées de mathématiques.** Programme M.P.C. Formulaire et corrigé. Fasc. B et C. — Un volume broché, $13,5 \times 21$, de 186 pages, avec figures. Prix: NF 15. — Gauthier-Villars, Paris, 1965.

Formulaire: Les quinze fonctions élémentaires. — Quelques valeurs numériques approchées. — Tableau synoptique relatif au chapitre I (A). — Primitives importantes. — Différentielles. — Tableau synoptique relatif

au chapitre V (A). — Formules d'approximation. — Méthodes de calcul numérique. — Echantillons de papiers logarithmiques. — *Réponses commentées*: Fonction exponentielle et équations différentielles linéaires. — Théorie élémentaire des fonctions d'une variable. — Intégrales simples. — Fonctions de plusieurs variables. — Séries. — Intégrales multiples. — Géométrie analytique. — Solutions aux problèmes d'examen.

D. KLEPPNER and N. RAMSEY. — **Quick calculus.** A short manual of self instruction. — Un volume broché, 15 × 23, de 294 pages, avec figures. — Prix: Sh. 17. — John Wiley, London, 1965.

A few preliminaries. — Differential calculus. — Integral calculus. — Review. — Derivations. — Additional topics. — Review problems. — Tables.

E. A. MAXWELL. — **A gateway to abstract mathematics.** — Un volume relié pleine toile, 13 × 19, de 139 pages, avec figures. — Prix: Sh. 16. — Cambridge University Press, 1965.

Digital arithmetic. — Polynomials in digital arithmetic. — The idea of a group. — A group of "product" operations in geometry. — Groups within groups. — Group structure on a circle. — An abstract structure for angles. — A very abstract algebra for angles. — Some metrical analogies.

H. VARCOLLIER. — **Nombres premiers, nombres avant-premiers.** — Un volume broché, 20,5 × 26,5, de 90 pages. Prix: NF 15. — Presses Universitaires de France, Paris, 1965.

Caractères de divisibilité. — Les nombres avant-premiers. — Nombres premiers.

K.-T. LEUNG and D.L.-C. CHEN. — **Elementary set theory. Part 1.** — Foreword by Yung-Chow Wong. — Un volume broché, 17,5 × 24,5, de 116 pages, avec figures. Prix: Sh. 15. — Oxford University Press, London, 1965.

Statement calculus. — Sets. — Relations. — Mappings.

S. WARNER. — **Modern algebra. Vol. 1.** — Prentice-Hall mathematics series. — Un volume relié pleine toile, 16 × 23,5, de 457 pages, avec figures. — Prentice-Hall, Englewood Cliffs, N.J., 1965.

Algebraic structures. — New structures from old. — The natural numbers. — Rings and fields. — Vector spaces. — Polynomials.

G.Ye. SHILOV. — **Mathematical analysis.** A special course. — Translated by J.D. Davis. — English translation edited by D.A.R. Wallace. — International series of monographs in pure and applied mathematics, vol. 77. — Un volume relié pleine toile, 15 × 22,5, de 485 pages, avec figures. Prix: Sh. 80. — Pergamon Press, Oxford, 1965.

Sets. — Metric spaces. — The calculus of variations. — Theory of the integral. — Geometry of Hilbert space. — Differentiation and integration. — The Fourier transform.

E.A. MAXWELL. — **Algebraic structure and matrices.** — Being part II of Advanced Algebra. — Un volume relié pleine toile, $14,5 \times 22$, de 316 pages, avec figures. Prix: Sh. 37. — Cambridge University Press, 1965.

Algebraic structure: One-process algebra. — Neutral elements and inverse operations. — The group structure. — Euclidean spaces. — Two-process algebra: vector spaces. — Two-process algebra: single set, rings and fields. — Subsets. — Theory of numbers: congruences. — Modules of integers. — Polynomial forms. — *Matrices:* Matrices and mappings. — The elementary manipulation of matrices. — Matrices of orders 2 and 3. — Partitioned matrices. — Mappings and vector spaces. — Linear equations: rank. — Some harder theorems on rank. — *Introduction to more advanced work:* Quadratic forms: eigenvectors. — Eigenvalues and eigenvectors: special matrices. — Some abstract conceptions. — Some matrix groups.

B. L. VAN DER WAERDEN. — **Mathematische Statistik.** — 2. Auflage. — Die Grundlehren der mathematischen Wissenschaften, Bd. 87. — Un volume relié pleine toile, 16×24 , de 360 pages, avec 39 figures et 13 tableaux. — Prix: DM 49,60. — Springer-Verlag, Berlin/Heidelberg/New York, 1965.

Allgemeine Grundlagen. — Wahrscheinlichkeiten und Häufigkeiten. — Mathematische Hilfsmittel. — Empirische Bestimmung von Verteilungsfunktionen, Mittelwerten und Streuungen. — Fourier-Integrale und Grenzwertsätze. — Gaußsche Fehlertheorie und Students Test. — Die Methode der kleinsten Quadrate. — Schätzung unbekannter Konstanten. — Auswertung von beobachteten Häufigkeiten. — Bio-Auswertung. — Prüfung von Hypothesen durch Tests. — Anordnungstests. — Korrelation. — Tafeln.

D. MUMFORD. — **Geometric invariant theory.** — Ergebnisse der Mathematik und ihrer Grenzgebiete. Neue Folge, Bd. 34. — Un volume relié pleine toile, 16×24 , de 145 pages, avec 8 figures. Prix: DM 22. — Springer-Verlag, Berlin/Heidelberg/New York, 1965.

Preliminaries: Definitions. — First properties. — Good and bad actions. — Further properties. — Resume of some results of Grothendieck. — *Fundamental theorems for the actions of reductive groups:* Definitions. — The affine case. — Linearization of an invertible sheaf. — The general case. — Functorial properties. — *Analysis of stability:* A numerical criterion. — The flag complex. — Applications. — *An elementary example:* Pre-stability. — Stability. — *Further examples:* Binary quantics. — Hypersurfaces. — Counter-examples. — Sequences of linear subspaces. — The projective adjoint action. — Space curves. — *The problem of moduli-1st construction:* General discussion. — Moduli as an orbit space. — First Chern classes. — Utilization of 4.6. — *Abelian schemes:* Duals. — Polariza-

tions. — Deformations. — *The method of covariants-2nd construction*: The technique. — Moduli as an orbit space. — The covariant. — Application to curves.

T. MATSUSAKA. — **Theory of Q-varieties.** — Publications of the Mathematical Society of Japan, vol. 8. — Un volume broché, 15×21 , de 158 pages. — The Mathematical Society of Japan, Tokyo, 1965.

Equivalence relations: Preliminaries. — Unmixed equivalence pair. — *Q-varieties and Q-manifolds*: Points, Q-varieties and Q-manifolds. — Specializations of points. — Subvarieties and covering sets. — Isomorphisms; conjugates. — Products and projections. — Topology. — Order of inseparability. — *Rational and birational transformations*: Preliminaries. — Rational correspondences. — Birational correspondences. — Abstract Q-varieties. — Q-submanifolds. — *Counter images of p-regular subvarieties*: The definition and a characterization. — Basic properties. — *Intersection-multiplicities*: Properties of the i-symbol. — Counter images of cycles. — Projection formula.

S. STRASZEWCZ. — **Mathematical problems and puzzles from the Polish Mathematical Olympiads.** — Translated from Polish by J. Smolska. — Popular lectures in mathematics, vol. 12. — Un volume relié pleine toile, $14,5 \times 22$, de 367 pages, avec figures. Prix: Sh. 50. — Pergamon Press, Oxford, 1965.

Arithmetic and algebra: Integers. — Polynomials, algebraic fractions, irrational expressions. — Equations. — Inequalities. — *Geometry and trigonometry*: Proving theorems. — Finding geometrical magnitudes. — Loci. — Constructions. — Maxima and minima. — Trigonometrical transformations.

I. NIVEN. — **Mathematics of choice or how to count without counting.** — New mathematical library. — Un volume broché, $15,5 \times 23$, de 202 pages, avec figures. Prix: \$1.95. — Random House, New York, 1965.

Introductory questions. — Permutations and combinations. — Combinations and binomial coefficients. — Some special distributions. — The inclusion-exclusion principle; probability. — Partitions of an integer. — Generating polynomials. — Distribution of objects not all alike. — Configuration problems. — Mathematical induction. — Interpretations of a non-associative product.

S. SAKS and A. ZYGMUND. — **Analytic functions.** — Second edition enlarged. — Translated by E.J. Scott. — Polska Akademia Nauk. Monografie matematyczne, tome 28. — Un volume relié pleine toile, $17,5 \times 24,5$, de 508 pages, avec figures. Prix: \$10. — Polish Scientific Publishers, Warszawa, 1965.

Theory of sets. — Functions of a complex variable. — Holomorphic functions. — Meromorphic functions. — Elementary geometrical methods

of the theory of functions. — Conformal transformations. — Analytic functions. — Entire functions and functions meromorphic in the entire open plane. — Elliptic functions. — The functions $\Gamma(s)$ and $\zeta(s)$. Dirichlet series. — Harmonic and subharmonic functions.

A. MIELE. — **Theory of optimum aerodynamic shapes.** Extremal problems in the aerodynamics of supersonic, hypersonic, and free-molecular flows. — Edited by Angelo Miele. — Applied mathematics and mechanics, vol. 9. — Un volume relié pleine toile, $16 \times 23,5$, de 455 pages, avec figures. Prix: \$16.50. — Academic Press, New York, 1965.

Elements of the calculus of variations: Introduction to the calculus of variations in one independent variable. — Generalized approach to the calculus of variations in one independent variable. — Introduction to the calculus of variations in two independent variables. — Generalized approach to the calculus of variations in two independent variables. — *Linearized supersonic flow:* Two-dimensional wings of minimum pressure drag. — Two-dimensional wings of minimum total drag. — Bodies of revolution having minimum pressure drag. — Three-dimensional wings of minimum pressure drag. — *Nonlinearized supersonic flow:* Second-order theory of optimum two-dimensional wings. — One-dimensional approach to optimum rocket nozzles. — General approach to optimum rocket nozzles. — *Newtonian hypersonic flow:* The Newtonian pressure law. — Slender shapes of minimum pressure drag. — Slender shapes of minimum total drag. — Optimum slender shapes with a variable skin-friction coefficient. — Non-slender bodies of revolution having minimum pressure drag. — Nonslender nose shapes of minimum pressure drag. — Effect of friction on optimum nonslender bodies of revolution. — Transversal contour of minimum pressure drag. — Transversal contour of minimum total drag. — Young's inequality and the problem of the optimum transversal contour. — Three-dimensional shapes of minimum total drag. — *Newton-Busemann hypersonic flow:* The Newton-Busemann pressure law. — Slender shapes of minimum pressure drag. — Nonslender shapes of minimum pressure drag. — Slender-body theory of flow around minimum drag shapes. — *Free-molecular flow:* Dynamics of free-molecular flow. — Optimum slender bodies. — Optimum nonslender bodies of revolution.

R. L. WILDER. — **Introduction to the foundations of mathematics.** — Second edition. — Un volume relié pleine toile, $15,5 \times 23,5$, de 327 pages. Prix: Sh. 60. — John Wiley, London, 1965.

Fundamental concepts and methods of mathematics: The axiomatic method. — Analysis of the axiomatic method. — Theory of sets. — Infinite sets. — Well-ordered sets; ordinal numbers. — The linear continuum and the real number system. — Groups and their significance for the foundations. — *Development of various viewpoints on foundations:* The early developments. — The Frege-Russell thesis: mathematics an extension of logic. — Intuitionism. — Formal systems; mathematical logic. — The cultural setting of mathematics.

M. DOLIGEZ. — **Gravitation. Contribution à la théorie corpuseulaire de la gravitation.** — Avec la collaboration de Gaston Doligez. — Un volume broché, 16×24 , de 134 pages, avec 26 figures et un tableau. Prix: F 15. — Albert Blanchard, Paris, 1965.

Gravitation. — Essai de détermination des caractéristiques du champ gravitationnel. — Action du champ gravitationnel sur le mouvement des corps matériels. — Modification du champ gravitationnel avec le temps. — Annexes.

S. WARNER. — **Modern algebra.** — Vol. 2. — Prentice-Hall mathematics series. — Un volume relié pleine toile, $16 \times 23,5$, de 806 pages, avec figures. — Prentice-Hall, Englewood Cliffs, N.J., 1965.

The real and complex number fields. — Algebraic extensions of fields. — Linear operators. — Inner product spaces. — The axiom of choice.

J. CRANK. — **Les mathématiques dans l'industrie.** — Traduit par René Marchand. — Un volume broché, $13,5 \times 21$, de 128 pages, avec 18 figures. Prix: F. 16.44. — Eyrolles, Paris, 1965.

Emplois des mathématiques. — Modèles mathématiques. — Variables sans dimensions. — Le filage dans l'industrie textile. — Les réacteurs nucléaires. — La programmation linéaire. — Aéronautique et météorologie. — La combustion du bois.

F. NEVANLINNA. — **Einführung in die Algebra und die Theorie der algebraischen Gleichungen.** — Lehrbücher und Monographien aus dem Gebiete der exakten Wissenschaften. Mathematische Reihe, Bd. 29. — Un volume relié pleine toile, $17 \times 24,5$, de 218 pages. Prix: Fr. 34,50. — Birkhäuser Verlag, Basel, 1965.

A. DENJOY. — **Hommes, formes et le nombre.** — Un volume broché, $14 \times 19,5$, de 286 pages. — Prix: F. 14. — Albert Blanchard, Paris, 1964.

Le savant, qu'est-il? — *Géomètres : leur esprit, leurs visages* : Henri Poincaré, Paul Painlevé, Henri Lebesgue, Emile Borel, Joseph Fourier, Pascal, le géomètre penseur. — *Epoques mathématiques* : Les mathématiques et les mathématiciens. Quelle idée le grand public peut s'en faire (1911). — L'orientation actuelle des mathématiques (1914). — Aspects présents de la pensée mathématique (1937). — Bourbaki et les mathématiques du jour (1949). — Archimède. — *Couserie académique*.