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Contient 19 exposés de: H. Berens. — C. Davis. — C. DeBoor. — R. DeVore, F. Richards. — Z. Ditzian, C. P. May. — J. L. Fields, M. E. Ismail. — P. M. Gauthier. — J. W. Jerome. — T. Lyche, L. L. Schumaker, — T. S. Motzkin, A. Sharma, E. G. Straus. — M. Munteanu. — A. M. Ostrowski. — I. J. Schoenberg. — C. DeBoor. — E. G. Straus. — R. DeVore. — A. Meir, A. Sharma. — P. D. Morris, E. W. Cheney. — R. S. Varga.

G. DOETSCH. — **Einführung in Theorie und Anwendung der Laplace-Transformation.** — 2. Auflage. Ein Lehrbuch für Studierende der Mathematik, Physik und Ingenieurwissenschaft. — Mathematische Reihe, Band 24. — Relié, $17 \times 24,5$. de 351 pages, avec 51 figures. — Birkhäuser Verlag, Basel/Stuttgart, 1970.

Einführung des Laplace-Integrals von physikalischen und mathematischen Gesichtspunkten aus. — Das Laplace-Integral als Transformation. — Die Frage der eindeutigen Umkehrbarkeit der Laplace-Transformation. — Die Laplace-Transformation der Distributionen. — Das Anfangswertproblem der gewöhnlichen linearen Differentialgleichung mit konstanten Koeffizienten. — Die gewöhnliche Differentialgleichung im Raum der Distributionen. — Normales und annormales System von simultanen Differentialgleichungen. — Das Verhalten der Laplace-Transformierten im Unendlichen. — Die komplexe Umkehrformel; die Fourier-Transformation. — Bedingung für die Darstellbarkeit als Laplace-Transformierte einer Funktion oder einer Distribution.

Bestimmung der Originalfunktion durch Reihenentwicklung der Bildfunktion. — Die Parsevalsche Gleichung der Fourier- und der Laplace-Transformation: die Abbildung des Produkts. — Der Begriff der asymptotischen Darstellung und Entwicklung. — Asymptotisches Verhalten der Bildfunktion im Unendlichen. — Asymptotisches Verhalten der Originalfunktion im Unendlichen. — Gewöhnliche Differentialgleichungen mit Polynomkoeffizienten. — Partielle Differentialgleichungen. — Integralgleichungen. — Anhang: Einige Begriffe und Sätze der Distributionstheorie.

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Espaces de suites. — Espaces de fonctions mesurables. — Espaces de fonctions continues. — Espaces de mesures. — Espaces de fonctions dérivables. — Espace $D_\infty(\Omega)$ et distributions. — Espaces de fonctions analytiques. — Appendice: Théoreme de Krein-Milman.

Nonlinear problems in the physical sciences and biology. — Proceedings of a Batelle summer institute, Seattle, July 3-28, 1972. — Lecture notes in mathematics, 322. — Broché, 17,5 × 25, de viii, 357 pages, avec 63 figures. — Prix: DM 26.00. — Springer, Berlin/Heidelberg/New York, 1973.

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J. Richard BUCHI; Dirk SIEFKES. — **The Monadic second order theory of all countable ordinals.** — Lecture notes in mathematics, 328. Decidable theories II. — Broché, 17,5 × 25,5, de vi, 217 pages. — Prix: DM 20.00. — Springer, Berlin/Heidelberg/New York, 1973.

The monadic second order theory of ω_1 : Monadic second order theories; the prenex form lemma; A method for eliminating set-quantifiers; The working of the method in the case of ω_0 ; The subset-construction extendet up to ω_1 ; The filters of closed cofinal sets; A decision method for MT [$\omega_1, <$]. — *Axiomatization of the monadic second order theory of ω_1 :* Axiomatization of monadic second order theories; Axiom systems for MT [co] and for MT [$\alpha, \alpha < \omega_1$]; The Automata normal form; The Completeness of \mathcal{A}_ω ; The deterministic automata normal form; \mathcal{Q}_0 and $\mathcal{A}_\alpha, \alpha < \omega_1$, are axiom systems; The axiom system \mathcal{Q}_1 for MT [ω_1]; The independance of the splicing axiom.

Walter TREBELS. — **Multipliers for (C, α) -Bounded Fourier Expansions in Banach Spaces and Approximation Theory.** — Lecture notes in mathematics, 329. — Broché, 17,5 × 25,5, de vii, 103 pages. — Prix: DM 16.00. — Springer, Berlin/Heidelberg/New York, 1973.

Introduction. — General theory. — Multiplier criteria for (C, α) -bounded expansions. — Particular sommation methods. — Applications to particular expansions.

Proceedings of the Second Japan-USSR Symposium on Probability Theory. — Lecture notes in mathematics, 330. — Broché, 17,5 × 25,5, de vi, 550 pages, avec 7 figures. — Prix: DM 36.00. — Springer, Berlin/Heidelberg/New York, 1973.

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Summer School on Topological Vector Spaces. — Lecture notes in mathematics, 331. — Broché, 17,5 × 25,5, de vi, 226 pages. — Prix: DM 20.00. — Springer, Berlin/Heidelberg/New York, 1973.

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Séminaire Pierre Lelong (Analyse) Année 1971-1972. — Institut Henri Poincaré, Paris. — Lecture notes in mathematics, 332. — Broché, 17,5 × 25,5, de v, 131 pages. — Prix: DM 16.00. — Springer, Berlin/Heidelberg/New York, 1973.

Contient 6 exposés de: D. Lazer. — J. F. Colombeau. — Ph. Noverraz. — L. Gruman. — S. Dineen. — P. Lelong.

Numerische, insbesondere approximationstheoretische Behandlung von Funktionalgleichungen. — Vorträge einer Tagung in Mathematischen Forschungsinstitut Oberwolfach, 4.-8.12.1972. — Lecture notes in mathematics, 333. — Broché, 17,5 × 25,5, de vi, 296 pages. — Prix: DM 24.00. — Springer, Berlin/Heidelberg/New York, 1973.

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Basic definitions. — Cylinders. — Increasing σ -fields. — Conditional expectations. — Ergodicity of the transformation. — Existence of an equivalent invariant measure. — The ergodic theorem. — Kuzmin's theorem. — Convergence results. — The Borel-Cantelli lemma of Schmidt-Philipp. — Some extensions of Kuzmin's theorem. — Outer measures. — Hausdorff measures. — Hausdorff dimension. — Billingsley dimension. — Comparison Theorems. — The main theorem of dimension theory of Jacobi algorithm. — Further results on Billingsley dimension. — Ergodic invariant measures. — Volume as appriximation measure. Proof of the conjecture for $n = 1$ and $n = 2$.

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Einführung. — Die Indexmethode. — Die Integralformelmethode. — Anwendungen der Integralformeln. — Die Maximummethode.

L'analyse harmonique dans le domaine complexe. — Actes de la Table ronde internationale du Centre national de la recherche scientifique tenue à Montpellier du 11 au 15 septembre 1972. — Edité par E. J. AKUTOWICZ. — Lecture notes in mathematics, 336. — Un volume broché, 17,5 × 25,5, de viii, 169 pages. — Prix: DM 18. — Springer, Berlin/Heidelberg/New York, 1973.

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Functional analysis. — Function spaces. — Partial differential operators. — General LP theory. — Relative compactness. — Elliptic operators. — Operators bounded from below. — Self-adjoint extensions. — Second order operators. — Applications. — Notes, remarks and references.

Linear Operators and Approximation. — Proceedings of the Conference held at the Oberwolfach Mathematical Research Institute, Black Forest, August 14-22, 1971. — Edited by P. L. Butzer, J. P. Kahane and B. Szökefalvi-Nagy. — Série internationale d'analyse numérique, vol. 20. — Un volume relié, $17 \times 24,5$, de 506 pages. — Prix: FS 84.00. — Birkhäuser Verlag, Basel/Stuttgart, 1973.

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Einleitung. — Kurventheorie. — Extreme bei Kurven. — Streifen. — Anfangsgründe der Flächentheorie. — Cartansche Differentialformen auf einer Fläche. — Innere Geometrie einer Fläche. — Fragen der Flächentheorie im Grossen. — Extreme bei Flächen.

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Beiträge zur Analysis 4. — Herausgegeben von Rolf Klötzler, Wolfgang Tutschke, Klaus Wiener. — Un volume broché, 17×24 , de 183 pages. — Prix: DM 34. — Veb Deutscher Verlag der Wissenschaften, Berlin, 1972.

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G. KEMPF; F. KNUDSEN; D. MUMFORD; B. SAINT-DONAT. — **Toroidal Embeddings I.** — Lecture notes in mathematics, 339. — Un volume broché, 16 × 24, de viii, 209 pages. — Prix: DM 20.00. — Springer, Berlin/Heidelberg/New York, 1973.

Equivariant Embeddings of Tori. — Semi-Stable Reduction. — Construction of Nice Polyhedral Subdivisions. — Further Applications.

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Einleitung. — Elementare Integrationsmethoden. — Existenz-, Eindeutigkeits- und Abhängigkeitssätze. — Lineare Differentialgleichungen im Reellen. — Anhang: Übungsaufgaben.

J. M. BOARDMAN, R. M. VOGL. — **Homotopy Invariant Algebraic Structures on Topological Spaces.** — Lecture notes in mathematics, 347. — Un volume broché, 16 × 24, de x, 257 pages. — Prix: DM 22.00. — Springer, Berlin/Heidelberg/New York, 1973.

Motivation and a historical survey. — Topological-algebraic theories. — The bar construction for theories. — Homotopy homomorphisms. — Structures on based spaces. — Iterated loop spaces and actions on classifying spaces. — Homotopy colimits. — Appendix. — References.

Proceedings of a Conference on Operator Theory. — Dalhousie University, Halifax, Nova Scotia, April 13th and 14th, 1973. — Edited by P. A. Fillmore. — Lecture notes in mathematics, 345. — Un volume broché, 16 × 24, de vi, 228 pages. — Prix: DM 20.00. — Springer, Berlin/Heidelberg/New York, 1973.

Contient 7 exposés de: C. A. Berger and B. I. Shaw. — L. A. Coburn. — R. G. Douglas and C. Pearcy. — L. G. Brown, R. G. Douglas and P. A. Fillmore. — J. Kaminker and C. Schochet. — J. William Helton and R. E. Howe. — L. G. Brown.

A. S. TROELSTRA. — **Metamathematical Investigation of Intuitionistic Arithmetic and Analysis.** — Lecture notes in mathematics, 344. — Un volume broché 16 × 24, de xvii 485 pages. — Prix: DM 34.00. — Springer, Berlin/Heidelberg/New York, 1973.

Intuitionistic formal systems. — Models and computability. — Realizability and functional interpretations. — Normalization theorems for systems of natural deduction. — Applications of kripke models. — Iterated inductive definitions, trees and ordinals. — Appendix: Hereditarily majorizable functionals of finite type.

Groupes de Monodromie en Géométrie Algébrique. — Séminaire de géométrie algébrique du Bois-Marie 1967-1969, (SGA 7 II) par P. Deligne et N. Katz. — Lecture notes in mathematics, 340. — Un volume broché, $16,5 \times 24$, de x, 438 pages. — Prix: DM 40.00. — Springer, Berlin/Heidelberg/New York, 1973.

Contient 13 exposés: Intersections sur les surfaces régulières. — Cohomologie des intersections complètes. — Quadriques. — Le formalisme des cycles évanescents. — Comparaison avec la théorie transcendance. — La formule de Picard-Lefschetz. — La formule de Milnor. — Pinceaux de Lefschetz: théorème d'existence. — Etude cohomologique des pinceaux de Lefschetz. — Le théorème de Noether. — Le théorème de Griffiths. — Le niveau de la cohomologie des intersections complètes. — Une formule de congruence pour la fonction.

Proceedings of the Conference on Orders, Group Rings and Related Topics. — Organized by J. S. Hsia. M. L. Madan and T. G. Ralley. — Lecture notes in mathematics, 353. — Un volume broché, 16×24 , de x, 224 pages. — Prix: DM 20.00. — Springer, Berlin/Heidelberg/New York, 1973.

Contient 14 exposés de: R. C. Alperin, R. Keith Dennis, M. R. Stein. — M. Auslander, I. Reiten. — G. Azumaya. — H. Bass. — R. Keith Dennis. — W. H. Gustafson. — T. A. Hannula. — S. Klasa. — I. Reiner, S. Ullom. — S. K. Sehgal. — R. G. Swan. — R. Ware. — T. Yamada. — H. Zassenhaus.

J. D. FAY. — **Theta Functions on Riemann Surfaces.** — Lecture notes in mathematics, 352. — Un volume broché, $16,5 \times 24$, de v, 137 pages. — Prix: DM 16.00. — Springer, Berlin/Heidelberg/New York, 1973.

Riemann's Theta Function. — The Prime Form. — Degenerate Riemann Surfaces. — Cyclic Unramified Coverings. — Bordered Riemann Surfaces. — Notational Index. — References.

H. TACHIKAWA. — **Quasi-Frobenius Rings and Generalizations.** — QF-3 and QF-2 Rings. — Notes by C. M. Ringel. — Lecture notes in mathematics, 351. — Un volume broché, $16,5 \times 24$, de xi, 172 pages. — Prix: DM 18.00. — Springer, Berlin/Heidelberg/New York, 1973.

Preliminaries. — Semi-perfect rings. — Morita duality. — Left QF-3 rings. — The structure of QF-3 rings. — Are noetherian, left QF-3 rings artinian, so QF-3 ? — Dominant dimension. — Conjectures arising from Nakayama's conjecture. — QF-3 rings and rings of finite representation type. — The double centralizer condition. — QF-3 rings. — QF-3 rings and categories of projective modules. — References.

Modular Functions of One Variable 3. — Proceedings International Summer School University of Antwerp, RUCA, July 17-August 3, 1972. — Edited by W. Kuyk, J. P. Serre. — Lecture notes in mathematics, 350. — Un volume broché, $16,5 \times 24$, de v, 350 pages. — Prix: DM 26.00. — Springer, Berlin/Heidelberg/New York, 1973.

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Meijer's G-Function. — Particular cases of Meijer's G-Function. — Integrals of G-Functions. — Finite and infinite series of G-Functions. — Computable representations of a G-Function in the logarithmic case. — Application of G-Function in statistics. — Other applications of the G-Function. — Appendix.

Cambridge Summer School in mathematical logic. — Held in Cambridge/England, August 1-21, 1971. — Edited by A. R. D. Mathias and H. Rogers. — Lecture notes in mathematics, 337. — Broché, 17,5 × 25,5, de ix, 660 pages. — Prix: DM 42. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

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Joram LINDENSTRAUSS; Lior TZAFIRI. — **Classical Banach spaces.** — Lecture notes in mathematics, 338. — Broché, 17,5 × 25,5, de ix, 243 pages. — Prix: DM 22. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Part I. Sequence spaces: Schauder bases; The spaces l_p and c_0 ; Symmetric bases; Orlicz sequence spaces. — *Part II. Function spaces*: Banach lattices; Lattice characterizations of some classical spaces; The L_p -spaces; The $C(K)$ -spaces and preduals of L_1 -spaces; The ℓ^p -spaces.

E. R. KOLCHIN. — **Differential algebra and algebraic groups.** — Pure and applied mathematics, vol. 54. — Relié, 16 × 23,5, de xvii, 446 pages. — Prix: \$24.50. — Academic Press, New York/London, 1973.

Algebraic preliminaries. — Basic notions of differential algebra. — Differential fields. — The Basis theorem and related topics. — Algebraic differential equations: Part A. Characteristic p arbitrary; Part B. Characteristic p = 0. — Algebraic groups. — Galois theory of differential fields.

L. L. HELMS. — **Einführung in die Potentialtheorie.** — Deutsche Übersetzung: Jürgen Bliedtner. — Relié, 16 × 23,5, de 305 pages. — Prix: DM 48. — Walter de Gruyter, Berlin/New York, 1973.

Harmonische Funktionen. — Harmonische Funktionen auf einer Kugel. — Randverhalten harmonischer Funktionen. — Superharmonische Funktionen. — Green-Funktionen. — Green-Potentiale. — Kapazität. — Das verallgemeinerte Dirichletsche Problem. — Das Dirichletsche Problem für umbeschränkte Mengen. — Feine Topologie. — Energie. — Der Martin-Rand.

S. BREHMER; H. HAAR. — **Differentialformen und Vektoranalysis.** — Mit 82 Abbildungen. Relié, 17 × 23,5, de 303 pages. — Prix: DM 28. — VEB Deutscher Verlag der Wissenschaften, Berlin, 1973.

Der p-dimensionale euklidische Raum E_p . — Riemannscher Inhalt und Riemannsches Integral. — Differentialrechnung. — Euklidische Punkt- und Vektorräume: Punkte, Vektoren und Tensoren; Kurven, Flächen, krummlinige Koordinaten. — *Vektoranalysis*: Integrale und Differentialformen; Der Satz von Stokes; Differentialformen und ihre

Integrale im euklidischen Raum; Die Differentialoperationen der Vektoranalysis; Element der Potentialtheorie; Vektor- und Tensoranalysis im krummlinigen Koordinaten. — Ausblick auf die Theorie der Riemannschen Räume: Topologische Räume, Hausdorffsche Räume; Differenzierbare Mannigfaltigkeiten; Affin zusammenhängende Räume; Riemannsche Räume.

Hermann MINKOWSKI. — **Briefe an David Hilbert.** — Mit Beiträgen und herausgegeben von L. Rüdenberg und H. Zassenhaus. — Mit 43 Abbildungen. — Broché, 18 × 24, de 165 pages. — Prix: DM 32. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Einleitung: Erinnerung an H. Minkowski (par Lily Rüdenberg). — Zur Vorgeschichte des Zahlberichts (par Hans Zassenhaus). — Über Friedrich Althoff (par Hans Zassenhaus). — Minkowski: Briefe an Hilbert.

H. KIESEWETTER. — **Vorlesungen über lineare Approximation.** — Studienbücherei. — Broché, 16,5 × 23, de 219 pages, avec 12 figures. — Prix: DM 16.80. — VEB Deutscher Verlag der Wissenschaften, Berlin, 1973.

Funktionalanalytische Grundlagen. — Grundlegende Sätze über beste Approximationen. — Konstruktion von besten Approximationen. — Anwendungen.

Steven A. GAAL. — **Linear analysis and representation theory.** — Die Grundlehren der mathematischen Wissenschaften, Band 198. — Relié, 15,5 × 23,5, de ix, 688 pages. — Prix: DM 124. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Algebras and Banach algebras. — Operators and operators algebras. — The spectral theorem, stable subspaces and V. Neumann algebras. — Elementary representation theory in Hilbert space. — Topological groups, invariant measures, convolutions and representations. — Induced representations. — Isomorphism theorems implying the Frobenius reciprocity relation. — Square integrable representations, spherical functions and trace formulas. — Lie algebras, manifolds and Lie groups.

Carl FAITH. — **Algebra: Rings, modules and categories I.** — Die Grundlehren der mathematischen Wissenschaften, Band 190. — Relié, 15,5 × 23,5, de xxii, 565 pages. — Prix: DM 54. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Introduction to the operations : Monoid, semigroup, group, category, ring and module : Operations: monoid, semigroup, group, and category; Product and coproduct; Ring and module; Correspondence theorems for projective modules and the structure of simple Noetherian rings; Limits, adjoints and algebras; Abelian categories. — *Structure of Noetherian semiprime rings :* General Weddeburn Theorems; Semisimple modules and homological dimension; Noetherian semiprime rings; Orders in semilocal matrix rings. — *Tensor algebra :* Tensor products and flat modules; Marita theorems and the Picard group; Algebras over fields. — *Structure of Abelian categories :* Grothendieck categories; Quotient categories and localizing functors; Torsion theories, radicals, and idempotent, topologizing, and multiplicative sets.

John B. CONWAY. — **Functions of one complex variable.** — Graduate texts in mathematics, 11. — Broché, 15,5 × 23,5, xi, 313 pages. — Prix: DM 41.10. — Springer Verlag, New York/Heidelberg/Berlin, 1973.

The complex number system. — Metric spaces and the topology of C. — Elementary properties and examples of analytic functions. — Complex integration. — Singularities. — Compactness and convergence in the space of analytic functions. — Runge's theorem. — Analytic continuation and Riemann surfaces. — Harmonic functions. — Entire functions. — The range of an analytic function.

Svatopluk FUČÍK; Jindrich NEČAS; Jiri SOUČEK; Vladimir SOUČEK. — **Spectral analysis of non-linear operators.** — Lecture notes in mathematics, 346. — Broché, 16,5 × 24,5, de 287 pages. — Prix: DM 26. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Preliminaries. — Fredholm alternative for non-linear operators. — Ljusternik-Schnirelmann theory. — Morse-Sard theorem. — The converse of Ljusternik-Schnirelmann theory. — Remark to M. A. Krasnoselskij's main bifurcation theorem. — Non-linear integral equations. — Boundary value problem for ordinary differential equations. — Nonanalytic case. — Nonlinear Sturm-Liouville equation. — Boundary value problem for partial differential equations. — Final remarks.

Keith J. DEVLIN. — **Aspects of constructibility.** — Lecture notes in mathematics, 354. — Broché, 16,5 × 24,5, de XII, 240 pages. — Prix: DM 22. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Elementary theory. — Jensen's fine structure theory. — On large cardinals in the constructible universe. — Model theory in the constructible universe; Morasses. — Large cardinals and constructibility. — Relative constructibility.

Maurice SION. — **A Theory of semigroup valued measures.** — Lecture notes in mathematics, 255. — Broché, 16,5 × 24,5, de 140 pages. — Prix: DM 16. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Semigroup valued outer measures. — Measurable and integrable functions. — Differentiation. — Appendix: The Lifting theorem.

N. J. A. SLOANE. — **A Handbook of integer sequences.** — Relié, 15 × 23,5, de XIII, 206 pages. — Academic Press, New York/London, 1973.

Description of the book. — How to handle a strange sequence. — Illustrated description of some important sequences. — The main Table of sequences. — Bibliography.

Boto von QUERENBURG. — **Mengentheoretische Topologie.** — Hochschultext. — Broché, 17,5 × 25,5, de VI, 194 pages. — DM 14,80. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Bezeichnungen und mengentheoretische Grundlagen. — Topologische Räume und stetige Abbildungen. — Erzeugung topologischer Räume. — Zusammenhängende Räume. — Filter und Konvergenz. — Trennungseigenschaften. — Normale Räume. — Kompakte Räume. — Satz von Stone-Weierstrass. — Parakompakte Räume und Metrisationssätze. — Uniforme Räume. — Vervollständigung und Kompaktifizierung. — Vollständige, Polnische und Bairesche Räume. — Funktionenräume. — Ringe reellwertiger Funktion.

Herbert HEYER. — **Mathematische Theorie statistischer Experimente.** — Unter Mitwirkung von Hartmut Scheller. — Hochschultext. — Broché, 16,5 × 24,5, de XXII, 209 pages. — Prix: DM 19,80. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Erschöpfende σ -Algebren. — Erschöpftheit unter Zusatzbedingungen. — Testexperimente. — Trennschärfe und isotoner Likelihoodquotient. — Schätzexperimente. — Informationsvergleich von Experimenten. — Vergleich endlicher Experimente.

Władysław NARKIEWICZ. — **Elementary and analytic theory of algebraic numbers.** — Monografie Matematyczne, tom 57. — Relié, 17 × 24,5, de 630 pages. — PWN-Polish Scientific Publishers, Warszawa, 1974.

Dedekind rings and valuations. — Algebraic numbers and integers. — Units and ideal classes. — Relative extensions. — p -adic fields. — Applications of the theory of

p-adic fields to algebraic number fields. — Analytical methods. — The class-number. — Further applications of analytical methods. — Appendix I: Locally compact Abelian groups. — Appendix II: Dirichlet series.

Hans LAUSCH; Wilfried NÖBAUER. — **Algebra of polynomials.** — North Holland mathematical Library, vol. 5, — Relié, 15,5 × 23, de xi, 322 pages. — Dfl. 50.00. — North Holland Publishing Co., Amsterdam/London; American Elsevier Publishing Co., New York, 1973.

Polynomials and polynomial functions. — Algebraic equations. — Composition of polynomials and polynomial functions. — Composition of polynomials and polynomial functions over rings and fields. — Composition of polynomials and polynomial functions over groups. — *Appendix* : Sets; Lattices; Multioperator groups; Rings; Fields; Semigroups and groups; Linear algebra and representation theory; Near rings; Miscellaneous.

D. H. FREMLIN. — **Topological Riesz spaces and measure theory.** — Relié, 15 × 23,5, de xiv, 266 pages. — Prix: £5.90. — Cambridge, At the University Press, 1954.

Riesz spaces. — Topological Riesz spaces. — Dual spaces. — Riesz spaces on Boolean rings. — Measure algebras. — Measure spaces. — Representation of linear functionals. — Weak compactness. — *Appendix* : Linear topological spaces; Spaces of continuous functions.

New developments in topology. — The edited and revised Proceedings of the Symposium on algebraic topology, Oxford, June 1972. — Edited by Graeme Segal. — London Mathematical Society lecture note series, 11. — Broché, 15 × 23, de 128 pages. — Prix: £2.60, \$7.95. — Cambridge, At the University Press, 1974.

Contient 11 articles de: J. F. Adams. — E. H. Brown Jr. and M. Comenetz. — A. Dold. — L. Hodgkin. — J. R. Hubbuck. — I. Madsen and R. J. Milgram. — J. P. May. — D. Quillen. — G. Segal. — C. T. C. Wall. — A. Zabrodsky.

Jean CHINAL. — **Design methods for digital systems.** — Translated from French by A. Preston and A. Summer. (French edition: “Techniques Booléennes et calculateurs arithmétiques”). — Relié, 15,5 × 23,5, de xvii, 506 pages, avec 310 figures et tables. — Prix: DM 88. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

General concepts. — Numeration systems. Binary numeration. — Codes. — Algebra of contacts. — Algebra of classes. Algebra of logic. — Boolean algebra. — Boolean functions. — Geometric representations of Boolean functions. — Applications and examples. — The Simplification of combinational networks. — Concept of the sequential network. — Sequential networks. Definitions and representations. — Regular expressions and regular events. — The Simplification of sequential networks and minimisation of transition tables. — The Synthesis of synchronous sequential networks. — Counters.

Theodor BRÖCKER; Klaus JÄNISCH. — **Einführung in die Differentialtopologie.** — Heidelberger Taschenbücher, Band 143. — Broché, 13,5 × 20,5, de 168 pages, avec 153 figures. — Prix: DM 14.80. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Mannigfaltigkeiten und differenzierbare Strukturen. — Der Tangentialraum. — Vektorraumbündel. — Lineare Algebra für Vektorraumbündel. — Lokale und tangentiale Eigenschaften. — Det Satz von Sard. — Einbettung. — Dynamische Systeme. — Isotopien von Einbettungen. — Die zusammenhängende Summe. — Differentialgleichungen 2. Ordnung und Sprays. — Exponentialabbildung und Tubenumgebungen. — Berandete Mannigfaltigkeiten. — Transversalität.

Wilhelm KLINGENBERG. — **Eine Vorlesung über Differentialgeometrie.** — Heidelberger Taschenbücher, Band 107. — Broché, 13,5 × 20,5, de x, 135 pages. — Prix: DM 14.80 — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Differentialrechnung im euklidischen Raum. — Kurven: allgemeine Theorie. — Ebene Kurven im Grossen. — Lokale Flächentheorie. — 2-dimensionale riemannsche Geometrie. — Flächentheorie im Grossen.

Heinz SCHECHER. — **Funktioneller Aufbau digitaler Rechenanlagen.** — Heidelberger Taschenbücher, Band 127. Sammlung Informatik. — Broché, 13,5 × 20,5, de XII, 261 pages, avec 178 figures. — Prix: DM 16.80. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Digitale Verknüpfungsglieder. — Aufbau einfacher Baugruppen aus den digitalen Verknüpfungsgliedern. — Funktioneller Aufbau des Rechenwerkes. — Die Steuerung der arithmetischen Operationsabläufe, Mikroprogramme. — Befehlswerke. — Speicherwerke, vorzugsweise Arbeitsspeicher. — Parallelarbeit einzelner Teilwerke der Anlage. — Automatischer Verkehr zwischen Arbeitsspeicher und den Hintergrundspeichern. — Die peripheren Geräte.

Constantin CORDUNEANU. — **Integral equations and stability of feedback systems.** — Mathematics in science and engineering, vol. 104. — Relié, 15 × 23,5, de IX, 238 pages. — Academic Press, New York/London, 1973.

Preliminaries. — Admissibility and Hammerstein equations. — Frequency techniques and stability. — Wiener-Hopf equations. — Further methods and topics.

Kurt Otto FRIEDRICH. — **Spectral theory of operators in Hilbert spaces.** — Applied mathematical sciences, 9. — Broché, 17 × 25,5, de VIII, 244 pages. — Prix: DM 14.50. — Springer Verlag, Berlin/Heidelberg/New York, 1973.

Spectral representation. — Norm and inner product. — Hilbert space. — Bounded operators. — Operators with discrete spectra. — Non-bounded spectra. — Differential operators. — Perturbation of spectra.

J. L. LIONS. — **Sur le contrôle optimal de systèmes distribués.** — Conférences faites, à l'invitation du Professeur Pontryagin et de l'Académie des sciences d'URSS, dans le cadre des Conférences de l'Union mathématique internationale, au Séminaire des Professeurs Nikolski et Pontryagin à l'Institut Stekloff, Moscou, Novembre 1972. — Monographie n° 20 de « L'Enseignement mathématique ». — Série des Conférences de l'Union mathématique internationale, n° 3. — Extrait de « L'Enseignement mathématique », 19 (1973), p. 125-166. — Un volume broché, 16 × 24, de 45 pages. — Prix: FS 12. — « L'Enseignement mathématique », Université/Genève, 1973.

Problèmes d'existence. — Cas linéaire quadratique. — Remarques sur le système d'optimalité. — Equations d'état non linéaires. — Phénomènes de perturbations singulières. — Problèmes de gestion optimale et inéquations variationnelles.

F. E. P. HIRZEBRUCH. — **Hilbert modular surfaces.** — Lectures given at Tokyo, February-March 1972, under the sponsorship of the International Mathematical Union. — Monographie n° 21 de « L'Enseignement mathématique ». — Série des Conférences de l'Union mathématique internationale, n° 4. — Extrait de « L'Enseignement mathématique », 19 (1973), p. 183-282. — Un volume broché, 16 × 24, de 103 pages. — Prix: FS 22. — « L'Enseignement mathématique », Université, Genève, 1973.

The Hilbert modular group and the Euler number of its orbit space. — The cusps and their resolution for the 2-dimensional case. — Numerical invariants of singularities and of Hilbert modular surfaces. — Curves on the Hilbert surfaces and proofs of rationality. — The symmetric Hilbert modular groups for primes $p \equiv 1 \pmod{4}$.

L. CHAMBADAL. — **Exercices et problèmes résolus d'algèbre.** — Un volume broché, $15,5 \times 24$, de 213 pages. — Gauthier-Villars, Paris, 1972.

Ensembles et structures algébriques. — Algèbre linéaire. — Polynômes. — Algèbre multilinéaire. — Réduction des endomorphismes. — Formes quadratiques et hermitiennes.

W. RUDIN. — **Functional analysis.** — McGraw-Hill series in higher mathematics. — Un volume relié, $17,5 \times 23,5$, de XIII, 197 pages. — McGraw-Hill Book Co., New York/St. Louis/San Francisco/etc., 1973.

General theory: Topological vector spaces; Completeness; Convexity; Duality in Banach spaces; Some applications. — *Distributions and Fourier transforms*: Test functions and distributions; Fourier transforms; Applications to differential equations; Tauberian theory. — *Banach algebras and spectral theory*: Banach algebras; Commutative Banach algebras; Bounded operators on a Hilbert space; Unbounded operators.

J. N. CROSSLEY; A. NERODE. — **Combinatorial functors.** — Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 81. — Un volume relié, 16×24 , de VIII, 146 pages. — Prix: DM 36. — Springer, Berlin/Heidelberg/New York, 1974.

Categories and functors. — Model theory. — Combinatorial functions. — Recursive equivalence. — Identities. — Frames. — The dimension case. — Sound values. — The automorphism extension property. — Satisfiability.

H. RADJAVI; P. ROSENTHAL. — **Invariant subspaces.** — Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 77. — Un volume relié, 16×24 , de XI, 219 pages. — Prix: DM 50. — Springer, Berlin/Heidelberg/New York, 1973.

Normal operators. — Analytic functions of operators. — Shift operators. — Examples of invariant subspace lattices. — Compact operators. — Existence of invariant and hyperinvariant subspaces. — Certain results on von Neumann algebras. — Transitive operator algebras. — Algebras associated with invariant subspaces. — Some unsolved problems.

F. F. BONSALL; J. DUNCAN. — **Complete normed algebras.** — Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 80. — Un volume relié, 16×24 , de X, 301 pages. — Prix: DM 68. — Springer, Berlin/Heidelberg/New York, 1973.

Concepts and elementary results. — Commutativity. — Representation theory. — Minimal ideals. — Star algebras. — Cohomology. — Miscellany.

J. DIEUDONNÉ. — **Cours de géométrie algébrique.** — I: Aperçu historique sur le développement de la géométrie algébrique. — Collection SUP, « Le mathématicien », 10. — Un volume broché, $11,5 \times 18$, de 234 pages. — Prix: FF 26.40. — Presses universitaires de France, Paris, 1974.

Préhistoire (ca. 400 av. J.-C. — 1630 apr. J.-C.). — Exploration (1630-1795). — L'âge d'or de la géométrie projective (1795-1850). — Riemann et la géométrie birationnelle (1850-1866). — Développement et chaos (1866-1920). — Nouvelles structures en géométrie algébrique (1920-1950). — Faisceaux et schémas (1950-). — Résultats récents et problèmes non résolus.

J. DIEUDONNÉ. — **Cours de géométrie algébrique.** — 2: Précis de géométrie algébrique élémentaire. — Collection SUP, « Le mathématicien », 11. — Un volume broché, 11,5 × 18, de 222 pages. — Prix: FF 26.40. — Presses universitaires de France, Paris, 1974.

Ensembles algébriques et fonctions régulières. — Prévariétés et variétés algébriques. — Variétés projectives et variétés complètes. — Théorie de la dimension. — Points normaux et normalisation. — Points simples et morphismes séparables. — Résultats d'algèbre. — Résultats de topologie. — Bibliographie commentée.

Higher K-theories. — Proceedings of the Conference held at the Seattle research Center of the Batelle Memorial Institute, from August 28 to September 8, 1972. — Edited by H. Bass. — Lecture notes in mathematics, 341. — Un volume broché, 16,5 × 24,5, de xv, 335 pages. — Prix: DM 26. — Springer, Berlin/Heidelberg/New York, 1973.

Comparisons and problems : 4 exposés de S. M. Gersten, D. W. Anderson, M. Karoubi et J. Wagoner. — *Constructions* : 3 exposés de D. Quillen, J. Wagoner et F. Keune. — *Toward some calculations* : 5 exposés de D. Quillen, D. Husemoller, S. Bloch, S. M. Gersten et S. B. Priddy. — *Higher K-theory and algebraic geometry* : 4 exposés de S. Bloch, K. S. Brown, S. M. Gersten et J.-P. Jouanolou.

“Classical” algebraic K-theory and connections with arithmetic. — Proceedings of the Conference held at the Seattle Research Center of the Batelle Memorial Institute, from August 28 to September 8, 1972. — Edited by H. Bass. — Lecture notes in mathematics, 342. — Un volume broché, 16,5 × 24,5, de xv, 527 pages. — Prix: DM 36. — Springer, Berlin/Heidelberg/New York, 1973.

The functors K_0 and K_1 : 9 exposés de H. Bass, L. Roberts, J.-L. Loday, C. Pedrini, M. P. Murthy, K. G. Choo, K. Y. Lam, E. Luft, A. J. Casson et F. Waldhausen. — *Representation theory* : 1 exposé de A. W. M. Dress. — *The functor K_2 of Milnor* : 6 exposés de R. K. Dennis, M. R. Stein, J. E. Humphreys, Wu-Chung Hsiang, A. E. Hatcher, B. Harris et J. Stasheff. — *K_2 of fields via symbols* : 4 exposés de H. Bass, J. Tate, R. Elman, T. Y. Lam, J. E. Carroll et J. Graham. — *Arithmetic aspects of K-theory* : 4 exposés de S. Lichtenbaum, J. Coates et J. Tate.

Hermitian K-theory and geometric applications. — Proceedings of the Conference held at the Seattle Research Center of the Battelle Memorial Institute, from August 28 to September 8, 1972. — Edited by H. Bass. — Lecture notes in mathematics, 343. — Un volume broché, 16,5 × 24,5, de xv, 572 pages. — Prix: DM 38. — Springer, Berlin/Heidelberg/New York, 1973.

Contient 13 exposés de J. L. Shaneson, M. Karoubi, H. Bass, C. T. C. Wall, A. A. Ranicki, R. Sharpe, L. R. Taylor, S. Cappell, S. Maumary et T. Petrie.

Modular functions of one variable II. — Proceedings International Summer School, University of Antwerp, RUCA, July 17-August 3, 1972. — Edited by Pierre Deligne and Willem Kuyk. — Lecture notes in mathematics, 349. — Un volume broché, 16,5 × 24,5, de 598 pages. — Prix: DM 38. — Springer, Berlin/Heidelberg/New York, 1973.

W. Casselman : An assortment of results on representations of $GL_2(k)$. — *P. Deligne* : Formes modulaires et représentations de $GL(2)$. — *W. Casselman* : On representations of GL_2 and the arithmetic of modular curves. — *P. Deligne et M. Rapoport* : Les schémas de modules de courbes elliptiques. — *I. I. Piateckii-Shapiro* : Zeta-functions of modular curves. — *R. P. Langlands* : Modular forms and l -adic representations. — *P. Deligne* : Les constantes des équations fonctionnelles des fonctions L.

W. L. J. VAN DER KALLEN. — **Infinitesimally central extensions of Chevalley groups.** — Lecture notes in mathematics, 356. — Un volume broché, 16,5 × 24,5, de vii, 147 pages. — Prix: DM 16. — Springer, Berlin/Heidelberg/New York, 1973.

Universal central extensions. Central trick. — Degenerate sums. The extension $r: g'_Z \rightarrow g_Z$. — The action \hat{Ad} . Structure of g_Z^* , g_R^* . — Admissible lattices and the category \mathcal{L}_V . Σ -connected components. — The G -module $\ker \pi$. — G -invariant [p]-structures. — The extension $\phi: G^* \rightarrow G$. — Extensions of G by a G -module. — The Hochschild groups. — The existence of $\phi: G^* \rightarrow G$. — Relations in the open cell. — Representatives in G^* of the Weyl group. — The Theorem of generators and relations and its consequences. — The group functor G^* .

W. BORHO; P. GABRIEL; R. RENTSCHLER. — **Primideale in Einhüllenden auflösbarer Lie-Algebren (Beschreibung durch Bahnenräume).** — Lecture notes in mathematics, 357. — Un volume broché, 16,5 × 24,5, de 182 pages. — Prix: DM 18. — Springer, Berlin/Heidelberg/New York, 1973.

Nicht-kommutative Algebra. — Restklassenalgebren von Einhüllenden auflösbarer Lie-Algebren. — Primitive Ideale und Bahnenräume. — Primideale und stabile Spektren.

F. L. WILLIAMS. — **Tensor products of principal series representations: reduction of tensor products of principal series; representations of complex semisimple Lie groups.** — Lecture notes in mathematics, 358. — Un volume broché, 16,5 × 24,5, de vi, 132 pages. — Prix: DM 16. — Springer, Berlin/Heidelberg/New York, 1973.

Preliminaries on induced representations. — Representations induced by characters of a subgroup of the Cartan subgroup. — The tensor product of principal series representations of a complex semi-simple Lie group.

U. STAMMBACH. — **Homology in group theory.** — Lecture notes in mathematics, 359. — Un volume broché, 16,5 × 24,5, de viii, 183 pages. — Prix: DM 18. — Springer, Berlin/Heidelberg/New York, 1973.

Varieties of groups. — Elements of homology theory. — Extensions in V with abelian kernel. — The lower central series. — Central extensions. — Localization of nilpotent groups.

W. J. PADGETT; R. L. TAYLOR. — **Laws of large numbers for normed linear spaces and certain Fréchet spaces.** — Lecture notes in mathematics, 360. — Un volume broché, 16,5 × 24,5, de 111 pages. — Prix: DM 16. — Springer, Berlin/Heidelberg/New York, 1973.

Mathematical preliminaries. — Random elements in separable metric spaces. — Laws of large numbers for random variables and separable Hilbert spaces. — Strong laws of large numbers for normed linear spaces. — Weak laws of large numbers for normed linear spaces. — Laws of large numbers for Fréchet spaces. — Some applications.

J. H. SCHUTZ. — **Foundations of special relativity: kinematic axioms for Minkowski space-time.** — Lecture notes in mathematics, 361. — Un volume broché, 16,5 × 24,5, de xi, 314 pages. — Prix: DM 26. — Springer, Berlin/Heidelberg/New York, 1973.

Kinematic axioms for Minkowski space-time. — Conditionally complete particles. — Implications of collinearity. — Collinear sub-sprays after coincidence. — Collinear particles. — Theory of parallels. — One-dimensional kinematics. — Three-dimensional kinematics. — Concluding remarks. — Characterisation of the elementary spaces. — Homogeneous coordinates in hyperbolic and euclidean spaces.

B. L. VAN DER WAERDEN. — **Einführung in die algebraische Geometrie.** — 2. Auflage. — Die Grundlehren der mathematischen Wissenschaften, Band 51. — Un volume relié, 16×24 , de xi, 280 pages, avec 17 figures, — Prix: DM 42. — Springer, Berlin/Heidelberg/New York, 1973.

Projektive Geometrie des n -dimensionalen Raumes. — Algebraische Funktionen. — Ebene algebraische Kurven. — Algebraische Mannigfaltigkeiten. — Algebraische Korrespondenzen und ihre Anwendung. — Der Multiplizitätsbegriff. — Lineare Scharen. — Der noethersche Fundamentalsatz und seine Folgerungen. — Die Analyse der Singularitäten ebener Kurven.

Proceedings of the Conference on the numerical solution of ordinary differential equations. — 19, 20 October, The University of Texas at Austin. — Edited by Dale G. Bettis. — Lecture notes in mathematics, 362. — Un volume broché, $16,5 \times 24,5$, de viii, 490 pages, avec figures et tables. — Prix: DM 34. — Springer, Berlin/Heidelberg/New York, 1974.

Contient 24 exposés de: Joseph Stoer, Fred T. Krogh, J. C. Butcher, Dale G. Bettis, Roy Danchick, Bernard E. Howard, Paul R. Beaudet, Hays Moore, D. B. Frazho, W. F. Powers, R. P. Canale, C. E. Velez, P. J. Cefola, A. C. Long, K. S. Nimitz, J. Baumgarte, E. Stiefel, R. Broucke, R. H. Miller, Roland Wielen, Guy Janin, Avram Hayli, Afaq Ahmad, Leon Cohen, Haywood Smith Jr., L. J. Gallaher, I. E. Perlin, P. J. Firnett, B. A. Troesch, Frank Stenger, Myron Lecar, Rudolf Loeser, Jerome R. Cherniack et Otis Graf.

Conference on the numerical solution of differential equations. — Dundee 1973. — by G. A. Watson. — Lecture notes in mathematics, 363. — Un volume broché, $16,5 \times 24,5$, de viii, 221 pages, avec figures et tables. — Prix: DM 20. — Springer, Berlin/Heidelberg/New York, 1974.

Contient 20 exposés de: R. Bartels, J. W. Daniel, C. de Boor, P. G. Ciarlet, L. Collatz, A. R. Gourlay, T. E. Hull, H.-O. Kreiss, J. D. Laubert, A. R. Mitchell, R. McLeod, K. W. Morton, V. Pereyra, H. J. Stetter, G. Strang, B. Swartz, B. Wendroff, V. Thomee, D. M. Young, E. L. Wachspress, O. C. Zienkiewicz et M. Zlamal.

Proceedings on infinite dimensional holomorphy. — University of Kentucky 1973. — Edited by T. L. Hayden and T. J. Suffridge. — Lecture notes in mathematics, 364. — Un volume broché, $16,5 \times 24,5$, de vi, 212 pages. — Prix: DM 20. — Springer, Berlin/Heidelberg/New York, 1974.

Contient 19 exposés de: Seán Dineen, Lawrence A. Harris, Michel Hervé, Pierre Lelong, Leopoldo Nachbin, C. E. Rikart, Józef Siciak, Lucien Waelbroeck, Volker Aurich, Jorge Alberto Barroso, Mário C. Matos, Philip J. Boland, J. F. Colombeau, Stephen J. Greenfield, Yves Hervier, Bengt Josefson, Philippe Noverraz, J. P. Ramis et Martin Schottenloher.

R. STEINBERG. — **Conjugacy classes in algebraic groups.** — Notes by Vinay V. Deodhar. — Lecture notes in mathematics, 366. — Un volume broché, $16,5 \times 24,5$, de vi, 159 pages. — Prix: DM 18. — Springer, Berlin/Heidelberg/New York, 1974.

Affine algebraic varieties, affine algebraic groups and their orbits. — Jordan decompositions, unipotent and diagonalizable groups. — Quotients and solvable groups. — Reductive and semisimple algebraic groups, regular and subregular elements.

R. J. MILGRAM. — **Unstable homotopy from the stable point of view.** — Lecture notes in mathematics, 368. — Un volume broché, 16,5 × 24,5, de 109 pages. — Prix: DM 16. — Springer, Berlin/Heidelberg/New York, 1974.

Iterated loop spaces. — The inclusion $X \rightarrow \Omega^n \Sigma^n X$. — The map $F_n(X) \rightarrow \Omega F_{n-1}(\Sigma X)$. — The cohomology of the F_n . — The structure of iterated loop spaces in the metastable range. — An unstable Adams spectral sequence. — The loop space functor for resolutions. — The metastable exact sequence. — Calculating the groups $\text{Ext}^{i,j}_{\mathcal{A}(2)}(H^*(F_L)/A, Z_2)$ — Calculations of the stable homotopy of the $K(\pi, n)$'s. — Some calculations of the stable homotopy groups for the $K(Z, n)$. — An example for the metastable exact sequence. — Further calculations for some truncated projective spaces.

Victoria Symposium on nonstandard analysis. — University of Victoria, 1972. — Edited by Albert Hurd and Peter Loeb. — Lecture notes in mathematics, 369. — Un volume broché, 16,5 × 24,5, de xviii, 339 pages. — Prix: DM 26. — Springer, Berlin/Heidelberg/New York, 1974.

Contient 31 exposés de: Andrew Adler, Michael Behrens, Sreven F. Bellenot, Allen R. Bernstein, Peter A. Loeb, Frank Wattenberg, Donald J. Brown, Abraham Robinson, Harry Gonshor, C. Ward Henson, L. C. Moore Jr., Joram Horschfeld, Albert E. Hurd, H. Jerome Keisler, Peter J. Kalemen, Anders Kock, Chr. Juul Mikkelsen, W. A. J. Luxemburg, Louis Narens, Rohit Parikh, Milton Parnes, R. G. Phillips, David Pincus, K. D. Stroyan, James K. Thurber, Jose Katz et Elias Zakon.

V. POENARU. — **Analyse différentielle.** — Lecture notes in mathematics, 371. — Un volume broché, 16,5 × 24,5, de 228 pages. — Prix: DM 20. — Springer, Berlin/Heidelberg/New York, 1974.

Le théorème de division de Mather. — Le théorème de préparation de Weirstrass-Malgrange-Mather. — Le théorème d'extension de Whitney. — Le théorème « de recollement » de Lojasiewicz. — Le théorème de synthèse spectrale de Whitney. — La division des distributions à partir de la résolution des singularités de Hironaka. — Sur la stabilité des applications différentiables. — Germes d'applications C_∞ . — Caractérisation des applications (et des germes d'application) stables.

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Basis concepts. — Continuous functions. — Periodic functions and periodic distributions. — Hilbert spaces and Fourier series. — Applications of Fourier series. — Complex analysis. — The Laplace transform.