IS APL EPIDEMIC ? OR A STUDY OF ITS GROWTH THROUGH AN EXTENDED BIBLIOGRAPHY

J. C. Rault and G. Demars
Laboratoire Central de Recherches
THOMSON-CSF
Domaine de Corbeville, B. P. 10
(91) Orsay, France

Summary:

An attempt is made to demonstrate that the use of APL is growing in an epidemic fashion. The theory of epidemic processes is applied in an approximate manner by means of data provided by a nearly-exhaustive bibliography given as an appendix. APL is proved to be undoubtedly epidemic.

A second part details the given bibliography.

Introduction

The few conferences held these past years on APL have demonstrated a fast growth of its use. At this time APL, as we hope this conference will show, is pervading every area of activity.

To the dismay of the vilifiers of APL, this pattern of development resembles the spread of an infectious disease.

The purpose of this paper is twofold: first establishing that APL is an epidemic, a commonplace assertion among APL supporters; second providing the APL community and the APL addicts to-come with an extended bibliography given in appendix. To our knowledge, such a bibliography has not been made available so far.

The Epidemiology of APL

The spread of scientific ideas has already been studied in terms of an epidemic process[1, 2, 3]. A thorough theory has been laid down and applied to the study of an entire discipline such as symbolic logic[3] for a one-hundred year time interval.

Along these lines we attempt here to apply the same theory to the growth of APL using as a data base a bibliography recently compiled.

Figure 1

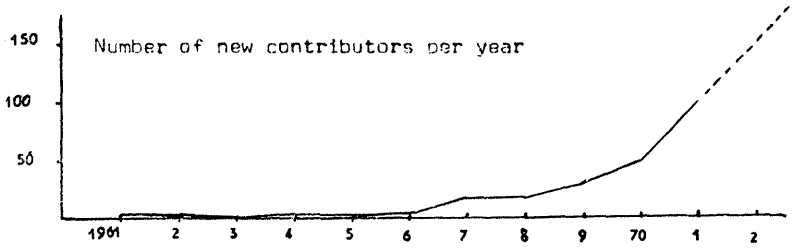


Figure 2

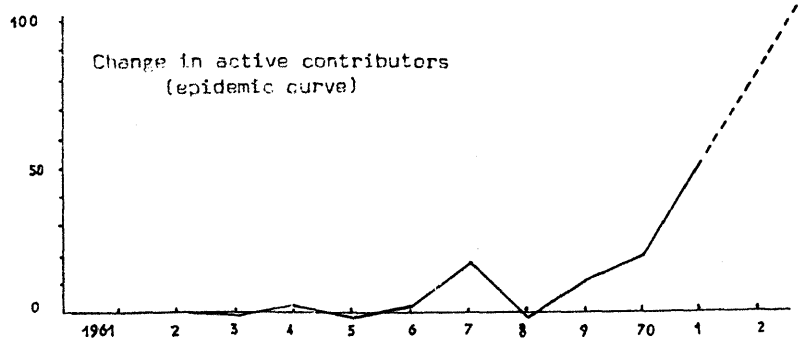


Figure 3

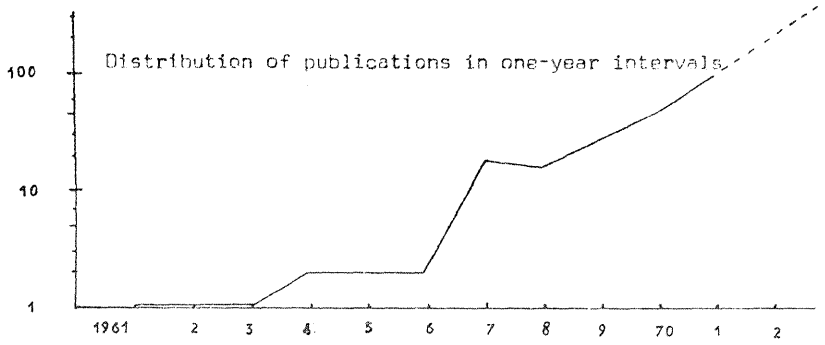
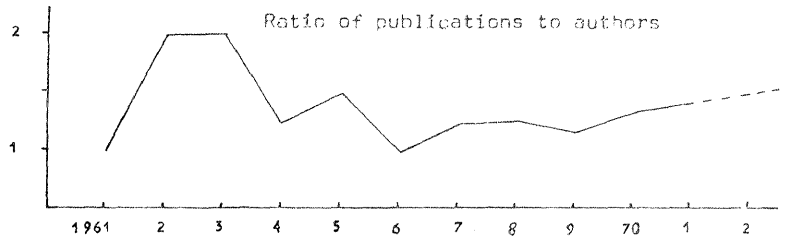


Figure 4



It would not be contended that this literature search is exhaustive and we are fully aware that improvements can be made.

This bibliography amounts to about 330 entries and 220 authors. Thus the APL epidemic process, investigated here, considers a population of 220 individuals, or infections, over a ten-year span. Taking into account that an entry may include several authors the total number of publications is 422.

Figure 1 shows the number of new contributors each year; figure 2, showing the change in the number of active contributors each year, represents the epidemic curve for APL since its inception. This curve reveals clearly that since 1968 APL is really an epidemic. This corresponds to the release of an "infectious material" by IBM, APL/360, as a class III product.

The shape of this epidemic curve does not allow one to foresee that the epidemic will stabilize in the near future, which, according to theory, should occur when the curve ceases to increase. (In fact this curve tends to grow exponentially).

Figure 3 gives the yearly number of publications; if the present rate of growth is maintained this year we may expect 250 papers in 1972 with 40 new authors.

Figure 4 indicates the yearly average number of publications per author. This ratio has increased continuously since 1969.

The above figures should not be taken as accurate ones but just as mere benchmarks manifesting that APL, in spite of its infectious character to certain people, is hale and hearty and thriving at a pace which may endanger soon the bailiwicks of those die-hard fossils that FORTRAN, BASIC and other patters are.

An Annotated Bibliography

Perusing the appended bibliography is sufficient to be convinced that APL is present in many fields. We intend here to make general comments for facilitating the use of this bibliography.

APL Implementations One may note the fact, which is not always well known except to specialists, that APL may now be found on major computers outside of IBM:

BURROUGHS:	23, 98, 144-46, 247, 298
CDC:	58
CII:	157-8, 181-2, 195-6, 198
DEC:	216
HONEYWELL/GE:	96
IBM:	22, 59, 77-80, 82, 312, 331
UNIVAC:	339
XDS:	21, 242-43, 285, 340
Microprogrammed APL machines:	16, 45, 102-106, 203, 207, 295-297

[Ed. note: numbers here refer to bibliography, not hardware!]

APL Compatible Terminals

A wide range of APL compatible peripherals are available. Reference 177 gives a nearly complete list of them (48, 62, 86, 101, 188, 250, 307).

APL File Handling Capabilities

Users of APL quite early have demanded facilities to work with large collections of data under program control. A number of file systems have been experiemnted or are presently available (37, 63, 84, 179, 189, 202, 262, 334, 338).

APL Handbooks

Many books, handbooks, user's manuals, videotapes and other materials are available: 6, 10, 23-24, 42, 43, 78-80, 95, 112, 140-2, 205, 219, 232, 235-38, 320-323, 329.

In the following we give for the most significative fields of application, the appropriate references where the reader may find more detail:

COMMERCIAL: 20

COMPUTER AIDED INSTRUCTION: 26, 29, 56, 71, 83, 99-100, 111,, 116, 127-8, 133, 165, 168, 176, 222, 254, 273, 304, 327

DATA BASES: 171-73

ENGINEERING:

- Digital Systems: 15, 29, 31, 33, 55, 61, 69, 74-76, 81, 89, 91, 110, 137-8, 160, 163, 199, 200, 206, 240
- Electrical Networks: 18, 19, 68, 97, 208-214, 218, 257, 259, 286
- General Engineering: 166, 191, 258
- Mechanical Design: 66, 139
- Survey: 174

FINANCE: 254

INSURANCE: 67, 135, 337

MANAGEMENT: 38, 87, 93, 162, 164, 255, 282, 291, 336

MATHEMATICS:

- Complex Arithmetic: 70
- Fast Fourier Transform: 139, 183, 280
- Formal Computation: 179, 280
- Graph Theory: 68
- Linear Programming: 194
- Numerical Analysis: 20, 27, 41, 46, 136, 276
- Operations Research: 112
- Optimization: 9
- PERT: 20, 192-93, 217, 265, 326, 331-32
- Sorting: 293
- Statistics and Probability: 11, 12, 20, 67, 108, 129, 155, 263-64, 266-71, 290
- Theorem Proving: 107, 204
- Walsh Functions: 251

MEDICINE: 300

RECREATION AND GAMES: 310, 311

TAXES: 260

Conclusions

Aside from the polemical aspect of this paper aimed to pique APL detractors, hope that it will be a contribution to the spreading of APL. We propose that this bibliography be augmented, improved and refined, possibly with the help of a KWIC index.

ACKNOWLEDGEMENTS

The authors wish to thank Dr. P. Abrams of CEGOS-INFORMATIQUE, Puteaux, France, and M. V. Chaptal of l'IRIA, Rocquencourt, France, for their contributions which aided in the preparation of this bibliography.

BIBLIOGRAPHY

1. W. Goffman. "Mathematical approach to the spread of scientific ideas", Nature, 212, pp. 449-452, October 1966.

2. W. Goffman and V. A. Newill. "Communications and epidemic processes", Proc. Royal Soc., A298, pp. 316-334, May 1957.

3. W. Goffman. "A mathematical method for analyzing the growth of a scientific discipline", Journal of the ACM, Vol. 18, No. 2, pp. 173-185, April 1971.

APPENDIX

(An APL Bibliography)

(1) P.S.ABRAMS=AN INTERPRETER FOR 'IVERSON NOTATION',TECH.REPT CS-47,COMPUTER SCIENCE DEPT,STANFORD UNIVERSITY,STANFORD CALIFORNIA,17 AOUT 1966.

(2) P.S.ABRAMS=AN APL MACHINE,PH.D. THESIS,STANFORD UNIVERSITY, STANFORD LINEAR ACCELERATOR CENTER,RPT NO.SLAC-114, FEVRIER 1970 ET AD.706-741.

(3) P.S.ABRAMS=INTRODUCTION AU LANGAGE APL,REVUE CEGOS-INFORMATIQUE,NO.34,P.5-7,MARS-AVRIL 1970.

(4) P.S.ABRAMS ET W.M.MC KEEMAN= COMPUTER DISPLAY OF THE DERIVED POLYTOPES,REVUE CEGOS-INFORMATIQUE,NO.36,P.25-36,JUILLET-AOUT 1970.

(5) P.S.ABRAMS=UNE NOUVELLE MACHINE POUR APL ,AFCET,CONGRES D'INFORMATIQUE,BROCHURE NO.2,P.85-106 ,PARIS,SEPTEMBRE 1970.

(6) P.S.ABRAMS ET G.LACOURLY=LE LANGAGE DE PROGRAMMATION APL, UNE INTRODUCTION,CEGOS-INFORMATIQUE 1971.

(7) P.S.ABRAMS=A FORMAL APPROACH TO APL SEMANTICS,COLLOQUE APL, 9-10 SEPTEMBRE 1971,PUBLICATION IRIA P.159-80.

(8) B.AMY,D.BASTIN,E.GIRARD ET J.C.RAULT=L'APL-UN OUTIL POUR LE DEVELOPEMENT DES PROGRAMMES,REVUE TECHNIQUE THOMSON-CSF, SEPTEMBRE 1972.

(9) B.AMY=A PROPOS D'UN PROGRAMME D'OPTIMISATION-ANALYSE NUMERIQUE ET LOGIQUE DES PROGRAMMES EN APL,REVUE TECHNIQUE THOMSON-CSF,SEPTEMBRE 1972.

(10) A.ANGER=THE APL LANGUAGE,J.WILEY,1971.

(11) F.J.ANSCOMBE=USE OF IVERSON'S LANGUAGE APL FOR STATISTICAL COMPUTING,DEPT OF STATISTICS,YALE UNIVERSITY,TECHNICAL REPT NO.4,JUILLET 1968 ET RAPPORT AD 672-557.

(12) F.J.ANSCOMBE=STATISTICAL COMPUTING WITH APL,1970.

(13) C.R.ATTANASIO,G.WALDBAUM ET F.ZARNFALLER=THE IMPLEMENTATION OF APL/360 FOR OPERATING SYSTEM/360,IBM RESEARCH DIVISION YORKTOWN HEIGHTS,N.Y.,4 JUIN 1968,RC-2109.

(14) J.N.BAIRSTOW=MR IVERSON'S LANGUAGE AND HOW IT GREW,COMPUTER DECISIONS,VOL.1,NO.1,P.42-45,SEPTEMBRE 1969.

(15) D.BASTIN,E.GIRARD ET J.C.RAULT=LA SIMULATION DES CIRCUITS LOGIQUES A L'AIDE D'UN SYSTEME APL,REVUE TECHNIQUE THOMSON-CSF,SEPTEMBRE 1972.

(16) G.BATTAREL,M.DELBREIL ET P.KALFON=UN INTERPRETEUR APL AVEC GENERATION ET REUTILISATION DE CODE MACHINE,COLLOQUE APL 9-10 SEPTEMBRE 1971,PUBLICATION IRIA P.383-402.

(17) R.BAYER=TOWARD COMPUTER-AIDED PRODUCTION OF SOFTWARE FOR MATHEMATICAL PROGRAMMING,IN MATHEMATICAL SOFTWARE,J.R.RICE, ACADEMIC PRESS 1971,P.275-93.

(18) W.R.BEAM=AN APL IMPLEMENTATION OF MICROWAVE CIRCUIT ANALYSIS TECHNICAL APPLICATIONS PAPERS,NEREM 1970,P.99-105.

(19) R.BEAUFILS,P.CAZAUX ET M.LABORIE=APPLICATION D'APL A L'UNIVERSITE DE TOULOUSE,COLLOQUE APL,9-10 SEPTEMBRE 1971 ,PUBLICATION IRIA.

(20) J.BECKER=EDITPAK,FINANCEPAK,MATHPAK,PLOTPAK,STATPAK, SCIENTIFIC TIME-SHARING CORP.,1969.

(21) G.A.BERGES ET F.W.RUST=APL/MSU REFERENCE MANUAL,DEPT OF EE, MONTANA STATE UNIVERSITY,BOZEMAN,MONTANA,26 SEPTEMBRE 1968.

(22) P.C.BERRY=APL/1130 PRIMER,IBM CORP.,1968,FORM NO.GC-20-1697-0.

(23) P.C.BERRY=APL/360 PRIMER,STUDENT TEXT,IBM CORP 1969, FORM NO.GC 20-1702-0.

(24) P.C.BERRY=APL/360 PRIMER,IBM CORP.,FORM NO.GH-20-0689-1 2NDE EDITION JANVIER 1970.

(25) P.C.BERRY,A.D.FALKOFF ET K.E.IVERSON=USING THE COMPUTER TO COMPUTE,A DIRECT BUT NEGLECTED APPROACH TO TEACHING MATHEMATICS,NEW-YORK IBM SCIENTIFIC CENTER,REPORT NO.320-2988,MAI 1970 ,ET IFIP WORLD CONFERENCE ON COMPUTER EDUCATION,AMSTERDAM,24-28 AOUT 1970.

(26) P.C.BERRY,G.BARTOLI,C.DELL'AQUILA ET V.N.SPADAVECCHIA=APL AND INSIGHT,A STRATEGY FOR TEACHING,COLLOQUE APL,9-10 SEPTEMBRE 1971,PUBLICATION IRIA P.251-72.

(27) T.A.BICKART=FUNCTION TO ACCELERATE AND/OR INDUCE SEQUENCE CONVERGENCE,APL QUOTE-QUAD,VOL.2,NO.1,P.8-9 AVRIL 1970

(28) D.BIXLER=MSU APL,MICHIGAN STATE UNIVERSITY,COMPUTER LABORATORY,NOTICE NO.356,7 FEVRIER 1972.

(29) L.BOLLIET=EXPERIENCES D'ENSEIGNEMENT AVEC APL,COLLOQUE APL 9-10 SEPTEMBRE 1971,PUBLICATION IRIA P.445-60.

(30) D.A.BONYUM=MARK-SENSE APL,APL QUOTE-QUAD,VOL.3,NO.1,P.18-19, 11 JUIN 1971.

(31) W.G.BOURICIUS,W.C.CARTER,K.A.DUKE,J.P.ROTH ET P.R.SCHNEIDER= INTERACTIVE DESIGN OF SELF-TESTING CIRCUITRY,PROCEEDINGS OF THE PURDUE SYMPOSIUM ON INFORMATION PROCESSING,AVRIL 1969 P.73-80.

(32) P.BRAFFORT=EPI-APL,FUNDAMENTAL INSIGHTS FROM ADVANCES IN NOTATIONAL SYSTEMATICS,SEAS ANNUAL MEETING,PISE,SEPTEMBRE 1971.

(33) J.L.BRAME ET C.V.RAMAMOORTHY=AN INTERACTIVE SIMULATOR GENERATING SYSTEM FOR SMALL COMPUTERS,SJCC 1971,P.425-449.

(34) L.M.BREED ET R.H.LATHWELL=THE IMPLEMENTATION OF APL/360 , DANS ''INTERACTIVE SYSTEMS FOR EXPERIMENTAL APPLIED MATHEMATICS'',ACADEMIC PRESS 1968,P.390-399,A.KLERER ET J.REINFELDS EDITORS,ET ACM SYMPOSIUM ON EXPERIMENTAL SYSTEMS FOR APPLIED MATHEMATICS 1967.

(35) L.M.BREED ET R.H.LATHWELL=APL/360,IBM CONTRIBUTED LIBRARY 360-D-03-007,1968.

(36) L.M.BREED=GENERALIZING APL SCALAR EXTENSION,APL QUOTE-QUAD, VOL.2 ,NO.6,MARS 1971,P.5-7.

(37) L.M.BREED=DESIGN OF THE APL PLUS FILE SUB SYSTEM,COLLOQUE APL 9-10 SEPTEMBRE 1971,PUBLICATION IRIA.

(38) J.A.BROADSTON=CHARTING SCHEDULE PERFORMANCE,PRODUCTION AND INVENTORY MANAGEMENT, 1ST QUARTER 1970,P.79-81.

(39) J.A.BROWN=USING THE ACKERMAN FUNCTION TO RATE PROGRAMMING LANGUAGES,APL QUOTE-QUAD,VOL.2,NO.1,P.4-5,AVRIL 1970.

(40) J.A.BROWN=A GENERALIZATION OF APL,PH.D. THESIS,DEPARTMENT OF SYSTEMS AND INFORMATION SCIENCE,SYRACUSE UNIVERSITY,SEPTEMBRE 1971.

(41) E.A.BUCHHEIT ET R.B.RODEN=APL ROUTINES FOR EVALUATING FUNCTIONS IN MATHEMATICAL PHYSICS,DEPT OF APPLIED ANALYSIS AND COMPUTER SCIENCE,RESEARCH REPORT CSRR.2029,NOVEMBRE 1970.

(42) P.CALINGAERT=INTRODUCTION TO A PROGRAMMING LANGUAGE,SCIENCE RESEARCH ASSOCIATES,CHICAGO,FIELD TEST EDITION,OCTOBRE 1967.

(43) R.S.CARBERRY ET COLL.=A PROGRAMMING LANGUAGE /1130, IBM CONTRIBUTED LIBRARY 1110-03-3-001,1968.

(44) V.CHAPTAL=COMPTE RENDU DU COLLOQUE APL,BULLETIN DE L'IRIA, NO.10,P.20-25,JANVIER 1972.

(45) V.CHAPTAL ET AL.=STRUCTURES ET SYSTEMES DE PROGRAMMATION, BULLETIN DE L'IRIA,NO.10,P.4-9,JANVIER 1972.

(46) S.CHARMONMAN,S.CABAY ET M.L.LOUIF-BYNE=USE OF APL/360 IN NUMERICAL ANALYSIS,DEPT OF COMPUTING SCIENCE,PUBLICATION NO.11,UNIVERSITY OF ALBERTA,EDMONTON,CANADA,DECEMBRE 1967.

(47) S.CHARMONMAN=A COMPARISON OF THE STRUCTURES OF APL,FORTRAN, ALGOL AND PL/1,APL QUOTE-QUAD,VOL.2,NO.4,P.2-4,JANVIER 1970.

(48) S.CHARMONMAN=SIXTY-CHARACTER REPRESENTATION OF APL SYMBOLS, APL QUOTE-QUAD,VOL.2,NO.2,P.5-10,10 JUILLET 1970.

(49) S.CHARMONMAN=A GENERALIZATION OF APL ARRAY ORIENTED CONCEPT, APL QUOTE-QUAD,VOL.2,NO.3,P.13-17,23 SEPTEMBRE 1970.

(50) S.CHARMONMAN=A GENERALIZATION OF APL ARRAY ORIENTED CONCEPT, SIGPLAN NOTICES,VOL.5,NO. 11,1970.

(51) S.CHARMONMAN=APL/UMC AN EXPERIMENTAL TRANSLATOR FOR BATCH PROCESSING OF A SUBSET OF APL,DEPARTMENT OF COMPUTER SCIENCE UNIVERSITY OF MISSOURI-COLUMBIA,1971.

(52) S.J.CLARK=APL/360 AND 1130 VERSIONS-A COMPARISON,MC DONNELL DOUGLAS-ASTRONAUTICS,MATHEMATICAL SCIENCES DEPARTMENT,HUNINGTON BEACH,CALIFORNIA,20 DECEMBRE 1969,A3-950-L240 TECHNICAL MEMO 69-15.

(53) J.F.CLEMENTI ET P.P.FLETCHER=MODIFICATIONS TO THE APL/1130 SYSTEM TO PROVIDE MORE CONVENIENT OPERATING ON A FORTRAN USER'S MACHINE,APL QUOTE-QUAD,VOL.3,NO.1,P.16-18,11 JUIN 1971,ET VOL.3,NO.2/3,P.40-42, 1 OCTOBRE 1971.

(54) I.J.COLE=SOME APPLICATIONS OF A PROGRAMMING LANGUAGE,GODDARD SPACE FLIGHT CENTER,GREENBELT,MARYLAND,N67-37397,AOUT 1967.

(55) M.CORREIA,D.COSSMAN,F.PUTZOLU ET T.S.NETHEN=MINIMIZING THE PROBLEM OF LOGIC TESTING BY THE INTERACTION OF A DESIGN GROUP WITH USER ORIENTED FACILITIES,SEVENTH DESIGN AUTOMATION WORKSHOP,JUIN 1970,P.100-107.

(56) J.D.COUGER=SCHOOLS,COLLEGES ATTEST TO APL GROWTH,COMPUTERWORLD,VOL.6,NO. 13,P.16,29 MARS 1972.

(57) C.J.CREVELING=EXPERIMENTAL USE OF A PROGRAMMING LANGUAGE (APL) AT THE GODDARD SPACE FLIGHT CENTER,GSFC REPORT NO.X560-68-420,NOVEMBRE 1968,GREENBELT,MARYLAND.

(58) N.DAIRIKE=LAWRENCE RADIATION LABORATORY APL IMPLEMENTATION ON CDC 6000-7600,APL QUOTE-QUAD,VOL.3,NO.1,P.10-11,JUIN 1971 ET APL USERS CONFERENCE WORKSHOP 3,BERKELEY,20-21 AVRIL 1971

(59) T.P.DANIELL=TIME-SHARING APL FOR IBM/1130 SYSTEMS,APL QUOTE-QUAD,VOL.3,NO.1,P.10-11,11 JUIN 1971 ET APL USERS' CONFERENCE WORKSHOP 3,BERKELEY,20-21 AVRIL 1971.

(60) I.DAVIDSON=SUMMARY OF CONFERENCE ON APRIL 6TH 1971 ON THE APPLICATION OF APL IN BELL NORTHERN RESEARCH AND BELL CANADA.

(61) W.H.E.DAY=COMPILER ASSIGNMENT OF DATA ITEMS TO REGISTERS, IBM SYSTEMS JOURNAL,NO.4 P.281-317,1970.

(62) M.DAYTON=A PLOTTER OF APL,APL QUOTE-QUAD,VOL.3,NO.1,11 JUIN 1971,P.13 ET APL USERS CONFERENCE WORKSHOP 3,BERKELEY 20-21 AVRIL 1971.

(63) G.DEMARS=SYSTEMES DE FICHIERS EN APL,RAPPORT INTERNE THOMSON-CSF,CCTI NO.2567,17 SEPTEMBRE 1971.

(64) G.DEMARS,J.C.RAULT ET G.RUGGIU=COMPTE RENDU DU COLLOQUE APL ORGANISE PAR L'IRIA LES 9 ET 10 SEPTEMBRE 1971,RAPPORT INTERNE THOMSON-CSF,LCR-DR5 NO.1607,23 SEPTEMBRE 1971.

(65) F.DESTOMBES=LE SYSTEME APL/360,COLLOQUE SUR LA TELEINFORMATIQUE 1969,TOME 1,P.414-421,EDITIONS CHIRON.

(66) G.DE VAHL DAVIS ET W.N.HOLMES=THE USE OF APL IN ENGINEERING EDUCATION,COLLOQUE APL,9-10 SEPTEMBRE 1971,PUBLICATION IRIA P.279-307.

(67) W.DE VRIES=WATCH YOUR(COMPUTER)LANGUAGE,THE ACTUARY,MARS 1971

(68) G.DHATT ET L.ROBICHAUD=FINITE ELEMENTS,FLOW -GRAPHS AND APL, COLLOQUE APL,9-10 SEPTEMBRE 1971,PUBLICATION IRIA P.37-69.

(69) K.A.DUKE,H.D.SCHNURMANN ET T.I.WILSON=SYSTEM VALIDATION BY THREE-LEVEL MODELING SYNTHESIS,IBM JOURNAL OF RESEARCH AND DEVELOPMENT,VOL.15,NO.2,P.166-74,MARS 1971.

(70) E.M.EDWARDS ET W.R.TINGA=AN APL COMPLEX ARITHMETIC PACKAGE, TECHNICAL APPLICATIONS PAPERS,NEREM 1970,P.106-112.

(71) E.M.EDWARDS=APL,A NATURAL LANGUAGE FOR ENGINEERING EDUCATION PART II,IEEE TRANSACTIONS ON EDUCATION,VOL.E-14,NO.4,P.179-80,NOVEMBRE 1971.

(72) D.W.EMBLEY=APL GRAPHICS,M.S. THESIS,DEPARTEMENT OF COMPUTER SCIENCE,UNIVERSITY OF UTAH, 1971.

(73) A.D.FALKOFF=ALGORITHMS FOR PARALLEL SEARCH MEMORIES,JOURNAL OF THE ACM,OCTOBRE 1962,P.488-511.

(74) A.D.FALKOFF,K.E.IVERSON ET E.H.SUSSENGUTH=A FORMAL DESCRIPTION OF SYSTEM/360,IBM SYSTEMS JOURNAL,VOL.3,NO.3,P.193-262, 1964.

(75) A.D.FALKOFF,K.E.IVERSON ET E.H.SUSSENGUTH=ERRATA FOR A FORMAL DESCRIPTION OF SYSTEM/360,IBM SYSTEMS JOURNAL,VOL.4, NO.1,P.84,1965.

(76) A.D.FALKOFF=FORMAL DESCRIPTION OF PROCESSES-THE FIRST STEP IN DESIGN AUTOMATION.PROCEEDINGS OF THE SHARE DESIGN AUTOMATION WORKSHOP,JUIN 1965.

(77) A.D.FALKOFF ET K.E.IVERSON=THE APL/360 TERMINAL SYSTEM P.22-37,DANS INTERACTIVE SYSTEMS FOR EXPERIMENTAL APPLIED MATHEMATICS,ACADEMIC PRESS,1968,M.KLERER ET J.REINFELDS EDITORS,ET ACM SYMPOSIUM ON EXPERIMENTAL SYSTEMS FOR APPLIED MATHEMATICS 1967.VOIR AUSSI IBM RESEARCH CENTER YORKTOWN, N.Y.,RC-1922,16 OCTOBRE 1967.

(78) A.D.FALKOFF ET K.E.IVERSON=THE APL TERMINAL SYSTEM =INSTRUCTIONS FOR OPERATIONS,IBM T.J.WATSON RESEARCH CENTER,YORKTOWN HEIGHTS,N.Y.10598,MARS 1967,REVU EN 1968.

(79) A.D.FALKOFF ET K.E.IVERSON=APL/360 USER'S MANUAL,IBM CORP.,T.J.WATSON RESEARCH CENTER,YORKTOWN HEIGHTS,N.Y.,10598,FORM GH.20-0683.

(80) A.D.FALKOFF ET K.E.IVERSON=APL/360 MANUEL D'UTILISATION 1968 TRADUCTION FRANCAISE PAR Y.G.RAYNAUD ET G.P.SIMIAN,UNIVERSITE PAUL SABATIER,TOULOUSE,1970.

(81) A.D.FALKOFF=CRITERIA FOR A SYSTEM DESIGN LANGUAGE,REPORT ON NATO SCIENCE COMMITTEE CONFERENCE ON SOFTWARE ENGINEERING TECHNIQUES,1970.

(82) A.D.FALKOFF ET K.E.IVERSON=APL/360-OS AND APL/360 DOS USER'S MANUAL,IBM FORM SH20-0906-0,FIRST EDITION,DECEMBRE 1970.

(83) A FALKOFF ET K.E.IVERSON=THE USE OF COMPUTERS IN TEACHING MATHEMATICS,IBM PHILADELPHIA SCIENTIFIC CENTER REPORT 320-2986,AVRIL 1970.

(84) A.D.FALKOFF=A SURVEY OF EXPERIMENTAL APL FILE AND I/O SYSTEMS IN IBM,COLLOQUE APL,9-10 SEPTEMBRE 1971,PUBLICATION IRIA,P.365-74.

(85) P.FALSTER=APL IS A TOOL FOR THE FORMULATION OF PROBLEMS, DATABEHANDLING,NO.9,P.28-34,1970.

(86) J.FLETCHER=AN 8-BIT ASCII CODE,APL.QUOTE-QUAD,VOL.3,NO.1 P.13,11 JUIN 1971,ET APL USERS CONFERENCE WORKSHOP 3, BERKELEY,20-21 AVRIL 1971.

(87) P.H.FORTIN,D.SAMSON,P.LAVERDIERE ET L.P.A.ROBICHAUD=UTILISATION D'APL DANS LE CADRE DU PROJET DES STATUTS DU QUEBEC, COLLOQUE APL,9-10 SEPTEMBRE 1970,PUBLICATION IRIA P.115-137.

(88) G.H.FOSTER=APL A PERSPICUOUS LANGUAGE,COMPUTERS AND AUTOMATION,VOL.18,NO.12,P.24-26,28,NOVEMBRE 1969.

(89) G.H.FOSTER=USING APL TO INVESTIGATE SEQUENTIAL MACHINES, TECHNICAL APPLICATIONS PAPERS,NEREM 1970,P.121-7.

(90) G.H.FOSTER=APL,A NATURAL LANGUAGE FOR ENGINEERING PT I,IEEE TRANSACTIONS ON EDUCATION,VOL.E-14,NO.4,P.174-179,NOVEMBRE 1971.

(91) T.D.FRIEDMAN ET S.C.YANG=METHODS USED IN AN AUTOMATIC LOGIC DESIGN GENERATOR-(ALERT)IEEE.TRANS. ON COMPUTERS, VOL.C-18,NO.7,P.593-614,JUILLET 1969.

(92) D.C.GAZIS=A COMPUTER MODEL FOR THE FINANCIAL ANALYSIS OF

(93) URBAN PROJECTS,IBM RESEARCH CENTER,YORKTOWN HEIGHTS,N.Y., 13 AVRIL 1970,RC-2850.

(94) L.I.GILMAN ET A.J.ROSE=NOTES FOR THE VIDEOTAPE COURSE,IBM RESEARCH DIVISION,YORKTOWN HEIGHTS,N.Y..

(95) L.C.GILMAN ET A.J.ROSE=APL/360,AN INTERACTIVE APPROACH,IBM CORP.1969 ET J.WILEY 1970.

(96) N.GLICK ET R.SCHRADER=APL ON THE HONEYWELL 635.APL QUOTE-QUAD,VOL.3,NO.1,P.11,11 JUIN 1971 ET APL USERS CONFERENCE WORKSHOP 3,BERKELEY 20-21 AVRIL 1971,APL QUOTE-QUAD,VOL.3, NO.2/3,P.20-30,1 OCT 1971.

(97) P.E.GRAY ET C.L.SEARLE=ELECTRONIC PRINCIPLES,PHYSICS,MODELS, AND CIRCUITS,J.WILEY 1969.

(98) L.GREENBERG=APL/6500,AT MICHIGAN STATE UNIVERSITY,APL QUOTE-QUAD,VOL.3,NO.1,P.20-21,11 JUIN 1971.

(99) P.GROSS,A.CROPLEY,B.HEBB ET R.PALMER=APL AND REMOTE TERMINAL USAGE FOR COMPUTER ASSISTED INSTRUCTION,MANCHESTER DATA FAIR 1969.

(100) H.R.HAEGI=EULER A CAI-SYSTEM BASED ON APL,UNIVERSITY OF ZURICH,1971.

(101) P.E.HAGGERTY=AN APL SYMBOL SET FOR MODEL 35 TELETYPES,APL QUOTE-QUAD,VOL.2,NO.3,P.6-8,23 SEPTEMBRE 1970.

(102) A.HASSITT,J.W.LAGESHULTE ET L.E.LYON=A MICROPROGRAMMED IMPLEMENTATION OF AN APL MACHINE,APL QUOTE-QUAD,VOL.3,NO.1, P.11-12,11 JUIN 1970 ET APL USERS CONFERENCE WORKSHOP 3, BERKELEY 20-21,AVRIL 1971.

(103) A.HASSITT,J.W.LAGESHULTE ET L.E.LYON=IMPLEMENTATION OF A HIGH LEVEL LANGUAGE MACHINE,PREPRINTS,ACM 4TH ANNUAL WORK-SHOP ON MICROPROGRAMMING,13-14 SEPTEMBRE 1971.

(104) A.HASSITT,J.W.LAGESHULTE ET L.E.LYON=A MICROPROGRAMMED APL MACHINE,COLLOQUE APL,PUB.IRIA,P.375-82,9-10 SEPT. 1971.

(105) A.HASSITT=MICROPROGRAMMING AND HIGH LEVEL LANGUAGES,INTER-NATIONAL IEEE COMPUTER CONFERENCE,P.91-92,SEPT.1971.

(106) A.HASSITT ET L.E.LYON=EFFICIENT EVALUATION OF ARRAY SUBSCRIPTS OF ARRAYS,IBM JOURNAL OF RESEARCH AND DEVELOPMENT VOL.16,NO.1,JANVIER 1972,P.45-57.

(107) W.S.HATCHER ET P.E.RETHIER=UNE APPLICATION DU LANGAGE APL AU PROBLEME DE DEMONSTRATION DE THEOREMES PAR ORDINATEUR,COLLO-QUE APL,PARIS 9-10 SEPTEMBRE 1971,PUBLICATION IRIA,P.443-443

(108) R.M.HEIBERGER=APL FUNCTIONS FOR DATA ANALYSIS AND STATISTICS RESEARCH REPORT CP-5,DEPT OF STATISTICS HARVARD UNIVERSITY, 31 MARS 1971.

(109) H.HELLERMAN=EXPERIMENTAL PERSONALIZED ARRAY TRANSLATOR SYSTEM,COMMUNICATIONS OF THE ACM,VOL.7,NO.7,PP.433-438, JUILLET 1964.

(110) H.HELLERMAN=DIGITAL COMPUTING SYSTEM PRINCIPLES,MC GRAW HILL 1967.

(111) J.C.HENSON ET W.F.MANRY=APL-AN INTRO,ATLANTA PUBLIC SCHOOLS ATLANTA,GEORGIA,2 NDE EDITION,AVRIL 1971.
VOIR APL QUOTE-QUAD,VOL.1,NO.3,P.3,OCTOBRE 1969.

(112) J.C.HERZ ET H.C.NGUYEN=APPLICATION DU LANGAGE APL A UN PROBLEME DE RECHERCHE OPERATIONNELLE,COLLOQUE APL,PUBL.IRIA P.141-56,9-10 SEPT.1971.

(113) J.A.HIGGINS=PROCEEDINGS OF THE APL USERS CONFERENCE AT S.U.N.Y.,BINGHAMPTON,JUILLET 1969.

(114) G.HORNE ET R.PIPER=A DESIGN FOR A 32-BIT COMPUTER USING APL STUDENTS AT POMONA COLLEGE,CLAREMONT,CALIFORNIA,MAI 1969.

(115) S.HUNKA=APL-A COMPUTING LANGUAGE DESIGNED FOR THE USER,THE BRITISH JOURNAL OF MATHEMATICAL AND STATISTICAL PSYCHOLOGY, VOL.20,PART.2,P.249-60,NOVEMBRE 1967.

(116) S.HUNKA=USE OF APL COMPUTER TERMINALS IN THE EDMONTON PUBLIC SCHOOLS.DIVISION OF EDUCATIONAL RESEARCH ,UNIVERSITY OF ALBERTA,EDMONTON,CANADA,1 AVRIL 1970-30 JUIN 1970 ET MARS 1971.

(117) D.HUTCHINSON=A NEW UNIFORM PSEUDORANDOM NUMBER GENERATOR, COMMUNICATIONS OF THE ACM ,VOL.9,NO.6,P.432-33,JUIN 1966.

(118) K.E.IVERSON=THE DESCRIPTION OF FINITE SEQUENTIAL PROCESSES INFORMATION THEORY,4TH LONDON SYMPOSIUM,C.CHERRY ED.,, BUTTERWORTHS 1961.

(119) K.E.IVERSON=A PROGRAMMING LANGUAGE,SJCC 1962,P.245-251, MAI 1962.

(120) K.E.IVERSON=A PROGRAMMING LANGUAGE,J.WILEY 1962.

(121) K.E.IVERSON=A COMMON LANGUAGE FOR HARDWARE,SOFTWARE AND APPLICATIONS,EASTERN JOINT COMPUTER CONFERENCE,P.121-9 (RC 749)DECEMBRE 1962.

(122) K.E.IVERSON=PROGRAMMING NOTATION IN SYSTEMS DESIGN,IBM SYSTEMS JOURNAL,VOL.2,NO.2,P.117-128,JUIN 1963.

(123) K.E.IVERSON=FORMALISM IN PROGRAMMING LANGUAGE,IBM CORP.,, T.J.WATSON RESEARCH CENTER,RC 992,2 JUILLET 1963.

(124) K.E.IVERSON=FORMALISM IN PROGRAMMING LANGUAGES,COMMUNICATIONS OF THE ACM,VOL.7,NO.2,P.80-88,FEVRIER 1964.

(125) K.E.IVERSON=RECENT APPLICATION OF A UNIVERSAL LANGUAGE,IFIP CONGRESS,NEW-YORK,24 MAI 1965 ET IBM RESEARCH RC 511,T.J. WATSON RESEARCH CENTER,YORKTOWN HEIGHTS,N.Y..

(126) K.E.IVERSON=ELEMENTARY FUNCTIONS,AN ALGORITHMIC TREATMENT, SCIENCE RESEARCH ASSOCIATES,CHICAGO,1966.

(127) K.E.IVERSON=THE ROLE OF COMPUTER IN TEACHING,QUEEN'S PAPERS ON PURE AND APPLIED MATHEMATICS,NO.13,1968,KIGNSTON,ONTARIO CANADA.

(128) K.E.IVERSON=THE USE OF APL IN TEACHING,IBM CORPORATION, FORM NO.320-0996-0,1969.

(129) K.E.IVERSON=THE USE OF APL IN STATISTICS,STATISTICAL COMPUTATION-PROCEEDINGS OF THE CONFERENCE AT THE UNIVERSITY OF WISCONSIN,AVRIL 1969,ACADEMIC PRESS,1969,R.C.MILTON ET J.A.NELDER EDS.,,P.285-294.

(130) K.IVERSON ET A.D.FALKOFF=AN INTRODUCTION TO APL,NEREM 1970, P.97-98 (40 TITRES).

(131) K.E.IVERSON=THE STORY OF APL,COMPUTING REPORT,VOL.6,NO.2,P. 14-18,1970.

(132) K.E.IVERSON=ELEMENTARY ALGEBRA,IBM PHILADELPHIA SCIENTIFIC CENTER,TECHNICAL REPORT NO.320-3001,JUIN 1971.

(133) K.E.IVERSON=ALGEBRA AS A LANGUAGE,COLLOQUE APL,PARIS 9-10 SEPTEMBRE 1971,IRIA,P.5-16.

(134) K.E.IVERSON=APL IN EXPOSITION,TECHNICAL REPORT NO. 320-3010, IBM PHILADELPHIA SCIENTIFIC CENTER,1971.

(135) R.W.JAMIESON=ACT,AN ACTUARIAL PROGRAMMING LANGUAGE,SUN LIFE MONTREAL,QUEBEC,CANADA,1970.

(136) M.A.JENKINS=THE SOLUTION OF LINEAR SYSTEMS OF EQUATIONS AND LINEAR LEAST SQUARES PROBLEMS IN APL,IBM PHILADELPHIA SCIENTIFIC CENTER,TECHNICAL REPORT NO.320-2989,JUIN 1970.

(137) D.C.JESSUP=POWER-DELAY PRODUCT EVALUATION FOR COMBINATIONAL LOGIC CIRCUITS,IBM RESEARCH CENTER,YORKTOWN HEIGHTS,N.Y.,, 20 JUIN 1969,RC-2513.

(138) L.R.JOHNSON=SYSTEM STRUCTURE IN DATA,PROGRAMS AND COMPUTERS, PRENTICE HALL 1970.

(139) A.L.JONES=THE USE OF APL/360 IN MECHANICAL ANALYSIS, PROCEEDINGS OF THE 1970 IEEE INTERNATIONAL COMPUTER GROUP CONFERENCE,NEW-YORK,JUNE 1970,P.195-204.

(140) H.KATZAN=A PROSE GLOSSARY OF APL,COMPUTERS AND AUTOMATION, P.39-42,AOUT 1970.

(141) H.KATZAN=APL PROGRAMMING AND COMPUTER TECHNIQUES, VAN NOSTRAND 1970.

(142) H.KATZAN=APL USER'S GUIDE,VAN NOSTRAND,1971. (VOIR CRITIQUES IEEE ON C.,OCT.71,P.1222-3).

(143) H.KATZAN=REPRESENTATION AND MANIPULATION OF DATA STRUCTURES IN APL,PROCEEDINGS OF A SYMPOSIUM ON DATA STRUCTURES IN PROGRAMMING LANGUAGES,UNIVERSITY OF FLORIDA,GAINESVILLE, 25-27 FEVRIER 1971,J.T.TOU ET P.WEGNER EDS.,PUBLICATION ACM.

(144) G.KILDALL=EXPERIMENTS IN LARGE SCALE COMPUTER DIRECT ACCESS STORAGE MANIPULATION,TECH. REPT.NO.69-01-1,COMPUTER SCIENCE GROUP,UNIVERSITY OF WASHINGTON,SEATTLE WASHINGTON, JANVIER 1969.

(145) G.KILDALL=APL/B 5500 THE-LANGUAGE AND ITS IMPLEMENTATION. TECH.REPT. NO.70-09-04,COMPUTER SCIENCE GROUP,UNIVERSITY OF WASHINGTON,SEATTLE,WASHINGTON,SEPTEMBRE 1970.

(146) G.KILDALL=PRELIMINARY APL/B 5500 MANUAL,UNIVERSITY OF WASHINGTON,COMPUTER CENTER,SEATTLE,WASHINGTON-1970.

(147) G.KILDALL,L.SMITH,S.SWEDINE ET M.ZOZEL=UNIVERSITY OF WASHINGTON APL/B5500 MANUAL,COMPUTER SCIENCE GROUP,UNIVERSITY OF WASHINGTON,SEATTLE,TECHNICAL REPORT NO.71-1-10, JANVIER 1971.

(148) H.G.KOLSKY=PROBLEM FORMULATION USING APL,IBM SYSTEMS JOURNAL,VOL.8,NO.3,P.204-17,1969(G.231-0018).

(149) K.L.KONNERTH=USE OF A TERMINAL SYSTEM FOR DATA ACQUISITION, IBM JOURNAL OF RES.AND DEV.,VOL.13,NO.1,P.132-138,JANVIER 1969.

(150) K.L.KONNERTH ET M.L.PHILLIPS=APL/1130 WITH GRAPHIC AND OTHER I/O CAPABILITIES,IBM YORKTOWN HEIGHTS,20 JUILLET 1970, RC 2964.

(151) K.KORN=APL USERS CONFERENCE AT SUNY,DATAMATION,NOV.1969.

(152) R.J.KORSAN=A PROPOSED APL EXTENSION,APL QUOTE-QUAD,VOL.3, NO.2/3,P.21-23,1 OCT. 1971.

(153) S.E.KRUEGER ET T.P.MC MURCHIE=A PROGRAMMING LANGUAGE, SCIENCE RESEARCH ASSOCIATES,CHICAGO,1968.

(154) S.E.KRUEGER ET T.D.MC MURCHIE=APL/1500 USER'S GUIDE,SCIENCE RESEARCH ASSOCIATES,CHICAGO,1968.

(155) G.LACOURLY ET L.LEBART=ANALYSE MULTIDIMENTIONNELLE INTERACTIVE D'UN ENSEMBLE DE DONNEES,COLLOQUE APL,9-10 SEPTEMBRE 1971.

(156) R.H.LATHWELL=THE IMPLEMENTATION OF APL/360,VIEW GRAPHS, INTERNATIONAL SUMMER SCHOOL ON NEW TRENDS IN COMPUTER PROGRAMMING,20 AOUT 1968.

(157) R.H.LATHWELL=APL/360 OPERATIONS MANUAL,IBM CORP.,1968.

(158) R.H.LATHWELL=APL/360 SYSTEM GENERATION AND LIBRARY MAINTENANCE,IBM CORP.,1968,GH20-0683.

(159) R.H.LATHWELL ET J.E.MEZEI=A FORMAL DESCRIPTION OF APL,PUB. IRIA,P.181-215,COLLOQUE APL,9-10 SEPT.1971.

(160) B.A.LAWS=A PARALLEL BCH DECODER,ONR TECH.REP.,CONTRACT N.00014,67-C.0477,15 JUIN 1970.

(161) Y.LE BORGNE=APL/360 AU CENTRE D'ETUDES ET RECHERCHES D'IBM FRANCE,COLLOQUE APL,PUB. IRIA,P.239-50,9-10 SEPT.1971.

(162) Y.LE BORGNE=APL LANGAGE DE PROGRAMMATION DES MANAGERS,IBM INFORMATIQUE,1971.

(163) Y.LE BORGNE ET V.RISO=LE LANGAGE APL/360,UN OUTIL POUR L'INGENIEUR,L'ONDE ELECTRIQUE,VOL.51,FASC.11,P.899-904, DECEMBRE 1971.

(164) J.H.LEE=ADVANCED DECISION-MAKING FOR PRIVATE REAL ESTATE AND CONSTRUCTION MANAGEMENT-AN APL PROGRAM,PROCEEDINGS OF THE SOUTHWESTERN IEEE CONFERENCE,AVRIL 1970,P.272-76.

(165) H.A.LEKAN=INDEX TO COMPUTER ASSISTED INSTRUCTION,3RD EDITION HARCOURT BRACE JOVANOVIC,1971.

(166) W.R.LE PAGE=APL-A NATURAL LANGUAGE FOR ENGINEERING EDUCATION PT.3,IEEE TRANS. ON EDUCATION,VOL.E-14,NO.4,P.180-83, NOV. 1971.

(167) LE PENVEN,Y.RAYNAUD,G.SIMIAN=APL/CII 10070,RAPPORT DU MARCHE CRI 70.007,JUIN 1971.

(168) G.LE PENVEN,Y.RAYNAUD,G.SIMIAN ET H.MARTIN=APL/CII 10070, RAPPORT DU MARCHE CRI 70.007,DECEMBRE 1971.

(169) R.LIKNAITZKY=APL FUNCTIONS FOR USE IN JUNIOR HIGH SCHOOL MATHEMATICS,REPORT CAI 3-69,NOVEMBRE 1969,DIVISION OF EDUCATIONAL RESEARCH,FACULTY OF EDUCATION,THE UNIVERSITY OF ALBERTA,EDMONTON,ALBERTA,CANADA.

(170) Y.LIU=REVERSE OPERATOR IN APL,COMPUTING CENTER NEWS,VOL.4, NO.4,P.9-10,SYRACUSE UNIVERSITY,1 MARS 1971.

(171) R.A.LORIE=APL AS A LANGUAGE FOR HANDLING A RELATIONAL DATA-BASE,IBM CORP.,CAMBRIDGE SCIENTIFIC CENTER,G320-2067, MARS 1971.

(172) R.A.LORIE ET A.J.SYMONDS=USE OF A RELATIONAL ACCESS METHOD UNDER APL,IBM CAMBRIDGE SCIENTIFIC CENTER,G320-2071, MAI 1971,ET SYMPOSIUM ON DATA BASE SYSTEMS,COURANT INSTITUTE OF MATHEMATICAL SCIENCES,MAI 1971.

(173) R.A.LORIE ET A.J.SYMONDS=INTERACTIVE PROBLEM SOLVING USING A RELATIONAL DATA-BASE IN APL,1971 INTERNATIONAL IEEE COMPUTER CONF.,P.191-92.

(174) G.LOTTO=ON-LINE ANALYSIS OF SURVEY DATA,IBM ASSD,MOHANSIC, DEPARTMENT 983.

(175) T.LUTZ=APL-PROFILE OF A DIALOGUE LANGUAGE,COMPUTER PRAXIS, VOL.4,NO.4,P.66-73,AVRIL 1971.

(176) T.MAC AULEY=CAL/APL COMPUTER ASSISTED LEARNING,A PROGRAMMING LANGUAGE AUTHOR'S MANUAL,INFORMATION SERVICES AND COMPUTER FACILITY,ORANGE COAST JUNIOR COLLEGE DISTRICT,COSTA MESA, CALIFORNIA,MAI 1969.

(177) H.P.MACON=A SURVEY OF APL COMPATIBLE TERMINALS,APL QUOTE-QUAD,VOL.3,NO.2/3,P.12-20,1 OCT.1971.

(178) G.MARTIN=UN LANGAGE DE MANIPULATION FORMELLE,PUB.IRIA, P.405-431,COLLOQUE APL,9-10 SEPTEMBRE 1971.

(179) H.MARTIN=SIMULATION EN APL DES COMMANDES D'UN SYSTEME DE GESTION DE FICHIERS POUR LE SYSTEME APL,CENTRE D'INFORMATIQUE DE TOULOUSE,JUIN 1971.

(180) P.MAURICE=DESCRIPTION DU SYSTEME 360 A L'AIDE DE LA NOTATION D'IVERSON,DIPLOME D'INGENIEUR ENSEIHT,TOULOUSE 1968.

(181) P.MAURICE ET P.C.SCHOLL=UN INTERPRETEUR DU LANGAGE APL POUR LE CII 90-80,BULLETIN DE L'IRIA,P.99-226,MARS 1971.

(182) P.MAURICE,Y.RAYNAUD ET G.SIMIAN=REALISATION D'APL A L'UNIVERSITE DE TOULOUSE,COLLOQUE APL,9-10 SEPTEMBRE 1971.

(183) G.K.MC AULIFFE=APL FAST FOURIER PROGRAM,IBM RESEARCH CENTER YOKTOWN HEIGHTS,N.Y.,MARS 1970,RC-2832.

(184) D.MC.CRACKEN=WHITHER APL-DATAMATION,VOL.16,NO.11,P.53-55, 15 SEPTEMBRE 1970.

(185) A.MC EWAN ET D.WATSON=APL/360 RECURSED,PART.1.APL QUOTE-QUAD VOL.2,NO.2,P.11-16,10 JUILLET 1970.

(186) T.D.MC MURCHIE=APPLAUSE FOR APL,COMPUTERS AND AUTOMATION, VOL.19,NO.3,P.4,MARS 1970.

(187) T.D.MC MURCHIE ET S.E.KRUEGER ET H.T.LIPPERT=A PROGRAMMING LANGUAGE/1500,AD.716-733,30 NOVEMBRE 1970.

(188) T.D.MC MURCHIE=A LIMITED CHARACTER APL SYMBOLISM,SIGPLAN NOTICES,VOL.6,NO.1,1971.

(189) T.D.MC MURCHIE ET D.B.THOMAS=APL/1500 FILE ACCESS SUBROUTINE PACKAGE,AD.717-928,1ER FEVRIER 1971.

(190) T.D.MC MURCHIE ET D.B.THOMAS=MANUAL OF APL/1500 FUNCTIONS-SYSTEM FUNCTIONS AD-717-737,1 FEVRIER 1971.

(191) H.MELMS=APL FOR GOVERNMENT TECHNOLOGY PROBLEMS,IBM NACHR., VOL.21,NO.205,P.646-54,FEVRIER 1971.

(192) M.S.MONTALBANO=TIME-SHARED CRITICAL PATH CALCULATIONS, 320-3219,AOUT 1967.

(193) M.MONTALBANO=HIGH-SPEED CALCULATION OF THE CRITICAL PATHS OF LARGE NETWORKS,IBM SYSTEMS JOURNAL,VOL.6,NO.3,P.163-191, 1967.

(194) M.S.MONTALBANO=CONVERSATIONAL LINEAR PROGRAMMING-A USER'S MANUAL FOR LPAPL,COMPUTERS IN MANAGEMENT EDUCATION,REPORT NO.1,IBM PALO ALTO SCIENTIFIC CENTER,320-3272,MARS 1970.

(195) R.MORE,Y.RAYNAUD ET G.SIMIAN=UN INTERPRETEUR EN MODE CONVERTIONNEL POUR LA NOTATION D'IVERSON,APPLICATION A LA DESCRIPTION FORMELLE DE SYSTEMES,GRENOBLE,OCTOBRE 1967.

(196) R.MORE,Y.G.RAYNAUD ET G.P.SIMIAM=UN LANGAGE CONVERSATIONNEL POUR L'AIDE A LA CONCEPTION ET A LA REALISATION DES SYSTEMES INFORMATIQUES,COLLOQUE SUR LA MICROELECTRONIQUE-TOULOUSE, MARS 1969.

(197) R.MORE,Y.G.RAYNAUD ET SIMIAN=UN LANGAGE DE PROGRAMMATION CONVERSATIONNEL,COLLOQUE INTERNATIONAL SUR LA TELE-INFORMATIQUE,P.158,TOME II,EDITIONS CHIRON,1969.

(198) R.MORE=CONTRIBUTION A LA REALISATION D'UN INTERPRETEUR APL CONVERSATIONNEL,THESE UNIVERSITE DE TOULOUSE,JANVIER 1971.

(199) A.MUKHOPADHYAY ET G.SCHMITZ=MINIMIZATION OF EXCLUSIVE-OR AND LOGICAL EQUIVALENCE SWITCHING NETWORKS.IEEE TRANS. ON COMPUTERS,VOL.C-19,NO.2,P.132-40,FEVRIER 1970.

(200) H.J.MYERS ET M.Y.HSIAO=AN APL ALGORITHM FOR CALCULATING BOOLEAN DIFFERENCE,AUTOMATIC SUPPORT SYSTEMS SYMPOSIUM FOR ADVANCED MAINTAINABILITY,ST-LOUIS,MO,NOVEMBRE 1968, P.5 D-1 A 5 D-10.

(201) W.H.NIEHOFF=A HYPOTHETICAL 32-BIT PROCESSOR FOR SYSTEMS TRAINING-ITS APL/360 DESCRIPTION AND SIMULATION,IBM SYSTEMS DEVELOPMENT DIVISION,ENDICOTT,N.Y.,22 MAI 1970,TR 01.1316.

(202) J.L.OWENS=BULK I/O AND COMMUNICATIONS WITH LIVERMORE TIME SHARING SYSTEM,APL QUOTE-QUAD,VOL.3,NO.1,P.7-8,11 JUIN 1971 ET APL USERS CONFERENCE WORKSHOP 3,BERKELEY 20-21 AVRIL 1971

(203) G.L.NOGUEZ ET D.M.PECCOUD=AN ARRAY PROCESSOR DESIGN FOR APL-LIKE DATA STRUCTURE,IFIP CONGRESS 1971,BOOKLET TA-4.

(204) P.D.PAGE=AN ON-LINE PROOF CHECKER OPERATING UNDER APL/360-APL QUOTE-QUAD,VOL.3,NO.1,P.4-5,11 JUIN 1971 ET APL USER'S CONFERENCE WORKSHOP 3,BERKELEY 20-21 AVRIL 1971,APL QUOTE-QUAD,VOL.3,NO.2/3,P.30-34,1 OCT.1971.

(205) S.PAKIN=APL/360 REFERENCE MANUAL,SCIENCE RESEARCH ASSOCIATES PALO ALTO,CALIFORNIA,2 NDE EDITION,1971.

(206) J.P.PAQUET=SIMPLIFICATION DES FONCTIONS BOOLEENNES A L'AIDE DES MATRICES A N DIMENSIONS-THESE UNIVERSITE LAVAL,QUEBEC, CANADA 1968.

(207) D.M.PECCOUD ET G.L.NOGUEZ=AN ARRAY PROCESSOR DESIGN FOR APL LIKE DATA STRUCTURES,IFIP CONGRESS 1971,NORTH HOLLAND.

(208) P.PENFIELD=MARTHA USER'S MANUAL,ELECTRODYNAMICS MEMO NO.6, 21 SEPT. 1970,MIT RESEARCH LABORATORY OF ELECTRONICS.

(209) P.PENFIELD=ADDENDUM TO MARTHA USER'S MANUAL,ELECTRODYNAMICS MEMO NO.12,13 NOV.1970,MIT RESEARCH LABORATORY OF ELECTRONICS.

(210) P.PENFIELD=GENERAL PURPOSE ELECTRIC-CIRCUIT ANALYZER IMBEDDED IN APL.ELECTRODYNAMICS MEMO NO.15,RESEARCH LAB.OF ELECTRONICS,MIT,26 FEVRIER 1971.

(211) P.PENFIELD=A SET OF APL PROGRAMS FOR USE IN NETWORK THEORY, APL QUOTE-QUAD,VOL.3,NO.1,P.4,11 JUIN 1971 ET APL USER'S CONFERENCE WORKSHOP 3,BERKELEY,20-21 AVRIL 1971.

(212) P.PENFIELD=GENERAL PURPOSE NETWORK ANALYSIS USING WIRING OPERATORS,IEEE CONFERENCE ON ELECTRICAL NETWORK THEORY,1971, P.116-117.

(213) P.PENFIELD=MARTHA USER'S MANUAL,THE MIT PRESS 1971.

(214) P.PENFIELD=DESCRIPTION OF ELECTRICAL NETWORKS USING WIRING OPERATORS,PROCEEDINGS OF THE IEEE,VOL.60,NO.1,P.49-53, JANVIER 1972.

(215) A.PERLIS=APL AS A CONVENTIONAL LANGUAGE-WHAT IS MISSING APL QUOTE-QUAD,VOL.3,NO.1,P.3-4,11 JUIN 1971 ET APL USERS CONFERENCE WORKSHOP 3,BERKELEY 20-21 AVRIL 1971.

(216) A.J.PERLIS,R.D.FENNELL,F.J.POLLACK,W.R.PRICE ET M.F.RIZZO= CONVERSATIONAL PROGRAMMING-APL,AN IMPLEMENTATION IN BLISS, AD.729-941,JUIN 1971.

(217) J.PLOTKE=MINIPERT,A TERMINAL CONTROLLED CRITICAL PATH TECHNIQUE,IBM SMD,DEPARTMENT 847,DIVISION 32,HARRISON.

(218) C.POTTLE,M.L.DERTOUZOS,I.LEE ET K.C.SMITH= ON IMPORTANT CURRENT ISSUES CONCERNING COMPUTERS IN ELECTRICAL ENGINEER-EDUCATION,IEEE TRANSACTIONS ON EDUCATION,VOL.E-14,NO.4, P.169-74,NOVEMBRE 1971.

(219) W.PRAGER=AN INTRODUCTION TO APL,ALLYN AND BACON INC.,1970.

(220) T.H.PUCKETT=NOTES ON THE INSTALLATION OF APL/OS,NEW MEXICO STATE UNIVERSITY,LAS CRUCES,NEW MEXICO,REPORT(505) 646-3439

(221) S.M.RAUCHER=INTRODUCTION TO APL-VIDEOTAPES,IBM CORP.,1968.

(222) S.M.RAUCHER=APL AND ITS USE IN THE CLASSROOM,JOURNAL OF THE ASSOCIATION FOR EDUCATION DATA SYSTEMS,DECEMBRE 1968.

(223) J.C.RAULT=SYSTEMES APL,RAPPORT INTERNE THOMSON-CSF,LCR-DR5, NO.1548,MARS 1971.

(224) Y.RAYNAUD=APL,SON IMPLANTATION,SON UTILISATION POUR L'AIDE A LA CONCEPTION DES SYSTEMES DE TRAITEMENT DE L'INFORMATION, BULLETIN DE L'IRIA,MARS 1971,P.6-98.

(225) R.J.D.REEVES=APL,A POTENTIAL LIABILITY,DATAMATION, 15 SEPTEMBRE 1971,P.71-72.

(226) H.A.REICH=AN EXPERIMENTAL SYSTEM FOR TIME-SHARED,ON-LINE DATA ACQUISITION,IBM JL OF RES. AND DEV.,VOL.13,NO.1,P.114-118,1969.

(227) B.ROBINET=SUR UN LANGAGE CONVERSATIONNEL,PROGRES ET SCIENCE, NO.4,1970.

(228) B.ROBINET=LE LANGAGE APL,OU L'ART DE PROGRAMMER EN LIBERTE, 01-INFORMATIQUE,P.45-50,11 DECEMBRE 1970.

(229) B.ROBINET,B.ARLETTAZ,J.C.GIRARD ET J.MICHEL=LE LANGAGE D'IVERSON,RAPPORT DGRST NO.69.01-586,PARIS,JUIN 1971.

(230) B.ROBINET=SEMANTIQUE D'APL,COLLOQUE APL,PUB.IRIA,P.217-232, 9-10 SEPT.1971.

(231) B.ROBINET,J.C.GIRARD ET B.ARLETTAZ=UN COMPILATEUR INCREMENTIEL D'APL,COLLOQUE APL,PUB.IRIA,P.315-337,9-10 SEPT.1971

(232) B.ROBINET=LE LANGAGE APL,EDITIONS TECHNIP 1971.

(233) B.ROBINET=SEMANTIQUE DES TABLEAUX-APPLICATION AU LANGAGE APL,THESE DE 3EME CYCLE,UNIVERSITE DE PARIS VI,28 FEVRIER 1972.

(234) W.M.RODGERS=PART 4 -A PRELIMINARY SURVEY OF GRAPHICAL DISPLAY SYSTEMS,AD-716-593,JUIN 1970.

(235) A.J.ROSE=VIDEOTAPED APL COURSE,IBM CORP.,1967.

(236) A.J.ROSE=TEACHING THE APL/360 TERMINAL SYSTEM,IBM CORP.,RC 2184,28 AOUT 1968,T.J.WATSON RESEARCH CENTER,YORKTOWN HEIGHTS N.Y..

(237) A.J.ROSE=APL FOR USERS OF BASIC,SCIENTIFIC TIMESHARING CORP.,WASHINGTON,D.C..

(238) B.ROSENKRANDS=APL EXERCISES,IBM DENMARK.

(239) B.ROSENKRANDS=GRAPHICS BY APL,PUB.IRIA,P.91-113,COLLOQUE APL 9-10 SEPTEMBRE 1971.

(240) J.P.ROTH=DIAGNOSIS OF AUTOMATA FAILURES,A CALCULUS AND A METHOD,IBM JOURNAL OF RESEARCH AND DEVELOPMENT,VOL.10, P.278-91,JUILLET 1966.

(241) J.P.ROTH,W.G.BOURICIUS ET P.R.SCHNEIDER=PROGRAMMED ALGORITHMS TO COMPUTE TESTS TO DETECT AND DISTINGUISH BETWEEN FAILURES IN LOGIC CIRCUITS,IEEE TRANSACTIONS ON EC, VOL,EC-16,NO.5,P.567-80,OCT.1967.

(242) D.RUDBERG,D.BRUNSVOLD ET M.HITCH=APL/MSU-BTM,USER'S MANUAL, A SUPPLEMENT TO THE APL/360,REFERENCE MANUAL,OR APL/360 PRIMER,AUTOMNE 1970.

(243) D.RUDBERG=APL,A NATURAL LANGUAGE FOR ENGINEERING EDUCATION PT IV,IEEE TRANS. ON EDUCATION,VOL.E-14,NO.4,P.183-85, NOV. 1971.

(244) D.RUETER=ARRAY FOR APL-DATAMATION,15 NOV.1971,P.17.

(245) G.RUGGIU=SEMANTIQUE DES LANGAGES DE PROGRAMMATION ET INTERPRETATION GLOBALE DES EXPRESSIONS,C.R. ACAD. SC.,PARIS, TOME 273-SERIE A,P.1271-1274,20 DECEMBRE 1971 ,ET TOME 274 SERIE A,P.100-103,3 JANVIER 1972.

(246) G.RUGGIU=DESCRIPTION SEMANTIQUE DES FONCTIONS PRIMITIVES D'APL,REVUE TECHNIQUE THOMSON-CSF,MARS 1972.

(247) J.RYAN=APL/700,AN APL IMPLEMENTATION FOR THE BURROUGHS 6700 AND 7700-APL QUOTE-QUAD,VOL.3,NO.1,P.12,11 JUIN 1971 ET APL USERS CONFERENCE WORKSHOP 3,BERKELEY 20-21 AVRIL 1971

(248) J.RYAN=GENERALIZED LISTS AND OTHER EXTENSIONS,APL QUOTE-QUAD VOL.3,NO.1,P.8-10 JUIN 1971.

(249) J.SAMMET=PROGRAMMING LANGUAGES,HISTORY AND FUNDAMENTALS, PRENTICE HALL,1969,P.247-53.

(250) D.SANT=THE M RX 1240 COMMUNICATION TERMINAL AND 1270 TRANSMISSION CONTROL UNIT,APL QUOTE-QUAD,VOL.3,NO.1,P.13,11 JUIN 1971 ET APL USERS CONFERENCE WORKSHOP 3,BERKELEY, 20-21 AVRIL 1971.

(251) R.O.SCHMIDT=A COLLECTION OF WALSH ANALYSIS PROGRAMS,IEEE TRANSACTIONS ON ELECTROMAGNETIC COMPATIBILITY,VOL.EMC-13, NO.3,P.88-94,AOUT 1971.

(252) P.SCHOLL=PROBLEMES RELATIFS A L'ANALYSE SYNTAXIQUE DE LA NOTATION D'IVERSON,DIPLOME D'INGENIEUR ENSEIHT,TOULOUSE,1968

(253) P.SCHOLL ET Y.RAYNAUD=PROBLEMES RELATIFS A L'ANALYSE SYNTAXIQUE DE LA NOTATION D'IVERSON,CENTRE D'INFORMATIQUE DE TOULOUSE,ANNEE 1967-68.

(254) G.P.SCHREIBER ET R.POLIVKA=EXPERIENCES AND OBSERVATIONS WITH A SELF-TEACHING COURSE IN APL,COLLOQUE APL, 9-10 SEPTEMBRE 1971,PUB.IRIA,P.77-90.

(255) C.SEABERG=COMPUTER ASSISTED FORECASTING-HOW BUSINESS IS USING APL-CANADIAN DATASYSTEMS ,VOL.3,NO.1,P.30-31, JANVIER 1971.

(256) C.SEABERG=APL IN FINANCIAL FORECASTING IS BASE FOR EVENTUAL MIS,CANADIAN DATASYSTEMS,VOL.3,NO.2,P.50-53,FEVRIER 1971.

(257) C.L.SEARLE=TEACHING OF TRANSISTOR CIRCUIT DESIGN USING A DIGITAL COMPUTER,IEEE TRANSACTIONS ON EDUCATION,VOL.E12,NO.3 P.216-22,SEPTEMBRE 1969.

(258) C.L.SEARLE=APL,A NATURAL LANGUAGE FOR ENGINEERING EDUCATION PT IV IEEE TRANS. ON EDUCATION,VOL.E-14,NO.4,P.185,NOV.1971.

(259) C.L.SEARLE=TRANSISTOR AMPLIFIER DESIGN-A STUDY IN WHEN NOT TO USE THE COMPUTER,IEEE TRANSACTIONS ON EDUCATION,1972.

(260) E.SHARON=AN APL/360 INCOME TAX PROGRAM,THE DESCRIPTION OF DATA PROCESSING PROCEDURES,IBM CORP.,MAI 1968,320-3242.

(261) I.P.SHARP=A BRIEF HISTORY OF APL,CANADIAN DATASYSTEMS,P.44-47 ET 74,FEVRIER 1970.

(262) I.P.SHARP=THE FUTURE OF APL TO BENEFIT FROM A NEW FILE SYSTEM,CANADIAN DATASYSTEMS,P.44-45,85,MARS 1970.

(263) K.W.SMILLIE=SOME APL PROGRAMS FOR STATISTICAL CALCULATIONS, DEPT. OF COMPUTING SCIENCE,UNIVERSITY OF ALBERTA,EDMONTON, CANADA,PUBLICATION NO.6,1967.

(264) K.W.SMILLIE=STATPACK 1,AN APL STATISTICAL PACKAGE,PUB.NO.9, DEPT. OF COMPUTING SCIENCE,UNIVERSITY OF ALBERTA,EDMONTON, CANADA,JANVIER 1968.

(265) K.W.SMILLIE=AN APL ALGORITHM FOR THE CRITICAL PATH,QUATERLY BULLETIN OF THE COMPUTER SOCIETY OF CANADA,VOL.8,NO 2, P.6-13,PRINTEMPS 1968.

(266) K.W.SMILLIE=STATPACK 2,AN APL STATISTICAL PACKAGE,DEPT OF COMPUTING SCIENCE,UNIVERSITY OF ALBERTA,PUB.17,FEVRIER 1969, EDMONTON,ALBERTA,CANADA.

(267) K.W.SMILLIE=SOME APL ALGORITHMS FOR ORTHOGONAL FACTORIAL EXPERIMENTS,DEPT. OF COMPUTING SCIENCE,PUBLICATION NO.18, UNIVERSITY OF ALBERTA,EDMONTON,ALBERTA,CANADA,JUIN 1969.

(268) K.W.SMILLIE=THE APL LANGUAGE AND STATISTICAL COMPUTATIONS, COMPUTER BULLETIN,VOL.13,NO.8,P.896-897,AOUT 1969.

(269) K.W.SMILLIE=AN INTRODUCTION TO APL/360 WITH SOME STATISTICAL APPLICATIONS,DEPT OF COMPUTING SCIENCE,PUBLICATION NO.19, UNIVERSITY OF ALBERTA,EDMONTON,ALBERTA,CANADA,JANVIER 1970.

(270) K.W.SMILLIE=STATISTICAL PROGRAMS IN APL/360,COMPUTER BULLETIN;VOL.14,NO.5,P.151-152,MAI 1970.

(271) K.W.SMILLIE=APL/360 WITH STATISTICAL EXAMPLES(NON PUBLIE) 1971.

(272) K.W.SMILLIE=APL AND STATISTICS,PROGRAMS OR INSIGHT,COLLOQUE APL,PUBLICATION IRIA,P.17-35,PARIS,9-10 SEPT.1971.

(273) V.N.SPADAVECCHIA,P.C.BERRY ET G.BARTOLI=AN ABSTRACT MACHINE FOR THE INTRODUCTION TO COMPUTER SCIENCE,COLLOQUE APL,9-10 SEPT. 1971,PUBLICATION IRIA,P.273-78.
(VOIR BERRY RAPPORT PUBLIE,FEVRIER 1972).

(274) T.A.STANDISH=AN ESSAY ON APL,DEPARTMENT OF COMPUTER SCIENCE, CARNEGIE-MELLON UNIVERSITY,PITTSBURGH,MARS 1969.

(275) G.P.STICKELER=REAL-WORLD APL,DATAMATION,1 DEC. 1971,P.19.

(276) R.K.STOCKWELL ET K.E.VAN BEE=USE OF APL TO IMPLEMENT ALGORITHMS FOR SPARSE LINEAR SYSTEMS,NEREM 1970,P.113-119.

(277) E.A.STOHR=SIMULATION OF SOME APL OPERATORS,REPORT LR-16, FEVRIER 1971,CENTER FOR RESEARCH IN MANAGEMENT SCIENCE, UNIVERSITY OF CALIFORNIA,BERKELEY,CALIFORNIA.

(278) O.STUTZ=APL/360 A TIME-SHARING SERVICE WITH A MODERN PROBLEM LANGUAGE.APL/360 A FORM OF SUBSCRIBER OPERATION WITH A MODERN PROBLEM LANGUAGE,IBM NACHRICHTEN,
VOL.20,NO.199,P.79-83,FEVRIER 1970.
VOL.20,NO.200,P.164-9,AVRIL 1970.

(279) Y.SUNDBLAD=THE ACKERMAN FUNCTION,A THEORETICAL COMPUTATIONAL AND FORMULA MANIPULATIVE STUDY,BIT,VOL.11,NO.1,1971.

(280) A.J.SURKAN=SYMBOLIC POLYNOMIAL OPERATIONS WITH APL,IBM JOURNAL OF RESEARCH AND DEVELOPMENT,VOL.13,NO.2,P.209-211 MARS 1969.

(281) A.J.SURKAN=DISCRETE FAST FOURIER TRANSFORMATION MADE SIMPLE BY A SINGLE RELIABLE APL FUNCTION,IBM RESEARCH CENTER, YORKTOWN HEIGHTS,N.Y.,22 AOUT 1969,RC-2591.

(282) Y.TALLINEAU=QUELQUES REFLEXIONS SUR LE COLLOQUE APL A L'IRIA,INFORMATIQUE ET GESTION,NOV.71,P.80.

(283) Y.TALLINEAU=L'APL UN LANGAGE ADAPTE A LA GESTION, INFORMATIQUE ET GESTION,NO.25,P.79-82,FEVRIER 1971.

(284) A.TAYLOR=APL,A COMPLEX OR SIMPLE LANGUAGE,COMPUTERWORLD, 1 AVRIL 1970.

(285) W.G.THISTLE AND D.S.GALBRAITH=DIFFERENCES BETWEEN DREV APL AND IBM APL/360,REPORT DREV M.2118/71,DEFENSE RESEARCH ESTABLISHMENT,VALCARTIER,QUEBEC,CANADA.

(286) R.D.THORNTON=COMPUTER-FLAVORED CIRCUIT THEORY,IEEE TRANS-ACTIONS ON EDUCATION,VOL.E-12,NO.3,P.219-222,SEPTEMBRE 1969.

(287) K.J.THURBER ET J.W.MYRNA=SYSTEM DESIGN OF A CELLULAR APL COMPUTER IEEE TRANSACTIONS ON COMPUTERS,VOL.C-19,NO.4,P.291-303,AVRIL 1970.

(288) B.TUCKERMAN=A STUDY OF THE VIGENERE-VERNAM SINGLE AND MULTIPLE LOOP ENGINEERING SYSTEMS,IBM RESEARCH REPORT (RC 2879)MAI 1970.

(289) H.VAN HEDEL=AN APL BATCH PROCESSOR,COLLOQUE APL,PUB.IRIA, P.339-64,9-10 SEPT.1971.

(290) U.M.VON MAYDELL=AN INTRODUCTION TO PROBABILITY USING APL, DEPT.OF COMPUTING SCIENCE,PUBLICATION NO.21,UNIVERSITY OF ALBERTA,EDMONTON,ALBERTA,CANADA,JUIN 1970.

(291) P.N.WAHI=AIMS-APPLIED INFORMATION AND MANAGEMENT SIMULATION, A GENERAL BUSINESS SIMULATION IN APL,IBM CORP.,CAMBRIDGE SCIENTIFIC CENTER,G320-2066,AVRIL 1971.

(292) J.WILLIAMS=CONDITIONAL BRANCH APL COMPILER,APL QUOTE-QUAD, VOL.3,NO.1,P.5-6,11 JUIN 1971 ET APL USERS CONFERENCE WORKSHOP 3,BERKELEY,20-21 AVRIL 1971.

(293) L.J.WOODRUM=INTERNAL SORTING WITH MINIMAL COMPARING,IBM SYSTEMS JOURNAL,VOL.8,NO.3,P.189-203,1969.

(294) L.J.WOODRUM=A MODEL OF FLOATING BUFFERING,IBM SYSTEMS JOUR-NAL,VOL.9,NO.2,P.118-144,1970.

(295) R.ZAKS,D.STEINGART ET J.MOORE=A FIRMWARE APL TIMESHARING SYSTEM,SJCC 1971,P.179-90.

(296) R.ZAKS ET D.STEINGART=A LANGUAGE MACHINE,APL QUOTE-QUAD, VOL.3,NO.1,P.6 ET APL USERS CONFERENCE WORKSHOP 3,BERKELEY, 20-21 AVRIL,APL QUOTE-QUAD,VOL.3,NO.2/3,P.34-39,1 OCT.71.

(297) R.ZAKS=MICROPROGRAMMED APL,INTERNATIONAL IEEE COMPUTER CONFERENCE,P.192-4,SEPT. 1971.

(298) M.ZOZEL=UNIVERSITY OF WASHINGTON IMPLEMENTATION,APL QUOTE-QUAD,VOL.2,NO.4,P.6-7,NOVEMBRE 1970.

(299) J.A.HIGGINS=PROCEEDINGS OF THE APL USERS CONFERENCE AT SUNY BINGHAMPTON,JUILLET 1969.

(300) APL USERS CONFERENCE WORKSHOP 3,BERKELEY,20-21 AVRIL 1971, VOIR APL QUOTE-QUAD,VOL.3,NO.1,P.3-13,11 JUIN 1971.

ANONYMOUS

(301) KIDNEY MATCHED BY COMPUTER,NEWS BRIEFS,DATAMATION AVRIL 1970,P.215-16.

(302) STORY OF APL-AN INTERVIEW WITH DR K.IVERSON,COMPUTERWORLD, 1 AVRIL 1970.

(303) CREATING PLAIN TALK FOR COMPUTERS,A PASSION FOR PRECISION LEADS KEN IVERSON TO AN EASY-TO-USE LANGUAGE,IBM MAGAZINE, VOL.2,NO.3,P.11-12,16 FEVRIER 1970.

(304) COMPUTING NEWSLETTERS FOR INSTRUCTORS OF DATA PROCESSING , MARS 1971 ET 1972.

(305) COMPUTERWORLD=EDITORIAL,16 AVRIL 1969.

(306) LE CULTE DE L'APL=INFORMATIQUE ET GESTION,OCT. 1971,P.11-12.

(307) UN TERMINAL SPECIAL APL INFORMATIQUE ET GESTION,OCTOBRE 1971 P.24,(TERMINAL OLIVETTI TE.338.APL).

PERIODICALS

(308) APL NEWSLETTERS,I.P.SHARP ASSOCIATES,MONTHLY PUBLICATION IN CANADIAN DATASYSTEMS.

(309) APL NEWSLETTER=W.JURAN EDITOR,PROPRIETARY COMPUTER SYSTEMS, 1662 SOUTH SATICOY STREET,VAN NUYS,CALIFORNIA,91406.

(310) APL QUOTE-QUAD
EDITORS=A.T.MC.EWAN ET D.W.A.WATSON
LAKEHEAD UNIVERSITY,THUNDER BAY,ONTARIO
DITRIBUTOR=G.H.FOSTER,SYRACUSE UNIVERSITY,SYRACUSE, NEW-YORK,USA.

(311) SEAS APL WORKING COMMITTEE=

SECRETARY=NIELS GELLERT,NEUCC,TECHNICAL UNIVERSITY OF DENMARK,2800 LYNGBY,DENMARK.

CHAIRMAN=P.S.ABRAMS,CEGOS-INFORMATIQUE,SERVICE APL, 14 RUE ANATOLE FRANCE,92 PUTEAUX,FRANCE.

IBM BROCHURES

(312) APL/360 OS AND APL/360 DOS GENERAL INFORMATION MANUAL, DECEMBRE 1970,GH20-0850.

(313) APL/360 OS AND APL/360 DOS USER'S MANUAL,DECEMBRE 1970, SH20-0906

(314) APL/360 OS AND APL/360 DOS SYSTEM MANUAL,FIRST EDITION, JUIN 1971,LY20-0678.

(315) APL/360 DOS OPERATIONS MANUAL,SEPTEMBRE 1969,H20-0685.

(316) APL/360 DOS SYSTEM GENERATION MANUAL,SEPTEMBRE 1969, H20-0686.

(317) APL/360 DOS OPERATIONS AND INSTALLATION MANUAL,DECEMBRE 1970 SH20-0938.

(318) APL/360 OS OPERATIONS AND INSTALLATION MANUAL,DECEMBRE 1970, SH20-0890.

(319) APL/360 TYPE III PROGRAM DOCUMENTATION,REPORT 360D.03.3.007.

(320) APL/360 PRIMER,SECONDE EDITION,JANVIER 1970,GH20-0689.

(321) APL/360 USER'S MANUAL,MARS 1970,GH20-0683.

(322) APL/360 BENUTZERHANDBUCH,GH12-1030.

(323) APL AUDIO EDUCATION PACKAGE,3 VOLUMES,1971.
SR20-9382,SR-20-9383,SR20-9384.

(324) APL REFERENCE DATA CARD,S210-0007.

(325) APL KEYBOARD TABS,GX20-1783.

(326) INTRODUCTION TO MINIPERT,THIRD EDITION,MAI 1971,GH20-0852.

(327) APL CAI GUIDE AND PROBLEM BOOK,IBM SDD LABORATORY EDUCATION DEPARTMENT,ENDICOTT,N.Y.,SEPTEMBRE 1970.

(328) APL/1130 KEYBOARD TABS,GX20-1784.

(329) APL/1130 PRIMER,STUDENT TEXT,SECOND EDITION MARS 1969.
GGC20-1697.

(330) APL/1130 CONTRIBUTED PROGRAM LIBRARY,REPORT 1130-03.3.001.

(331) IBM MINIPERT,DATAMATION,1 MARS 1971,P.59.

(332) KEC.(KOMMUNERNES EDB-CENTRAL,COPENHAGEN)
MAO5 USER'S PROGRAM DESCRIPTION.
KEC-PERT

(333) INDUSTRIAL COMPUTER SYSTEMS=MINI-MANUAL,A CONDENSED INTRODUCTION TO APL,254 WEST 31 STREET,N.Y. 1001.

(334) PROPRIETARY COMPUTER SYSTEMS,INC.=PCS/APL PUBLIC LIBRARY GUIDE,FEVRIER 1971.

FMS CONCEPTS,1970.

(335) STSC=APL/360 PACKAGE GEARED TO SHARED LARGE FILES,COMPUTERWORLD,17 JUIN 1970,P.24.

(336) MISPAK-MANAGEMENT INFORMATION SYSTEM,APL PLUS.

(337) SUN LIFE MONTREAL,ACTUARIAL PACKAGE.

(338) THE COMPUTER COMPANY,RICHMOND,VIRGINIA=FMS-FILE MANAGEMENT SYSTEMS,1970.

(339) UNIVERSITY OF MARYLAND=APL/1100.

(340) XDS=APL/UTS,DATAMATION,NOVEMBRE 1971.