A Bibliography of Publications about the *MACSYMA* and *VAXIMA* Symbolic Algebra Languages

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Title word cross-reference

#3 [Fit73]. **#4** [Fit73].

$(i + j, j)$ [Str85]. F [PW85a]. G [PW85a]. $\longrightarrow$ [Pit79]. p [Wan79]. $\mathbf{Q}(\sqrt{2})$ [Deu93]. $\mathbf{Q}(\sqrt{3})$ [Deu93]. r^t [BBR85]. U(3) $\supset$ SO(3) [Dra01]. $x' = y$ [RK87]. $y' = 0$ [RK87]. Z_p [Str85].

-adic [Wan79].

//sagemath.org [Den13].

12th [GE94]. **13th** [H$^+$91]. **14th** [HSW83]. **17** [TMH99]. **1974** [Jen74, Ros74]. **1977** [F$^+$77]. **1979** [Lew79, Ng79]. **1980** [Ano80]. **1981** [Wan81]. **1982** [Cal82]. **1983** [Gen83]. **1984** [GH84, SS84]. **1985** [ACM85]. **1987** [Ear88]. **1988** [IEE88b, WGM88]. **1989** [Nel89]. **1991** [IEE91, PEK91]. **1992** [Fli93]. **1993** [AAC93, GE94]. **1999** [TMH99]. **1999/088** [TMH99]. **19th** [Hei87].

2 [BH95]. **2.1** [Fel96]. **20th** [WGM88].

4-17 [Ear88].

54Th [Ano84]. **578** [BR73].

6000 [Str74]. **6000/7000** [Str74].

7000 [Str74]. **'74** [Jen74]. **'79** [Ng79, IJC79].

'81 [Wan81]. **'85** [Buc85, Cav85]. **'86**

[Cha86]. **'89** [ACM89, Nel89].

'90 [Mio90, WN90]. **'91** [Wat91]. **'92** [Wan92]. **'94** [ACM94].

Accelerator [IEE92a, BFBZ92]. **ACM** [ACM85, ACM89, Pet71, Wan81]. **ACM-SIGSAM** [ACM89]. **Adaptive** [RH86]. **Addendum** [FG80, Fat82a, Mat80]. **adic** [Wan79]. **Advanced** [Ear88, JS87]. **Aerodynamics** [Meh86]. **aid** [Cre89, Cre90a, Fra84]. **Aided** [Ban84, Rei81, Wan84, DJ89, ET88a, ET88b, GJK88, MS91, WS91a, WS91b, WS92]. **Algebra** [Cav85, DST88, Fat81, GCL92, Gol86, GKW03, HWH91, HN85, Jen84, Koe92, KLW90, KWW92, NMM90, Pav85c, Pav86, Rei81, Sua84, YP91, van82, AP90, Ben98, BFBZ92, Cal82, Che88, CP92, Fat15, FP95, HT90b, Kut88, Lan89, LR08, Mat89b, MT94, PF95, Ran84, Ran87, RA87, Ran94, Roe95, SH10, TTDD91, TM89, TH94, Way90, Wes99, Sch84]. **Algebra-System** [KWW92]. **Algebraic** [ACM89, ACM94, Bre84, Cha86, DST88, Eng76, FFF$^+$84, Mos71a, Mos71c, Pet71, TM89, Wan81, Wan92, WN90, Wat91, BF72, CRDMBR19, DST87, DS81, Fat15, GJK88, Mar71b, Ng79, Sas86, Str74, TH90, Tra84, Una88]. **algébriques** [DST87]. **ALGOL** [PI64]. **Algorithm** [Baj86, RH86, Wan79, Wan82, CG90, GHR10, Mos69, MY73, TM85]. **algorithmes** [DST87]. **Algorithmic** [Koe93]. **Algorithms** [DST88, GCL92, BMM90, DST87, SB89, Zip79]. **ALPAL** [Pai92]. **Alternative** [Coo84, Fat15]. **alternor** [MSI90]. **American** [AAC93, PEK91, SS84]. **analog** [SDF88]. **Analysis** [AM90, Ban84, BMS88, Cha92, Cre89, DS81, JM87, Mag89, RW86, SC87, SK86, Wan84, WKB86, AM89, Cre90a, Cre90b, ET88a, ET88b, ET89, GD93, HFO94, HT90b, Hol86, Ols92, Ran88, SDF88, WS92, MS91]. **analytic** [Dra01, Fra84]. **Analytical** [HJL91, WH84a, WS88]. **Angeles** [Pet71]. **anisotropic** [CHH91]. **Annual** [Gra94, PEK91, SS84]. **annuli** [TTDD91]. **Anwendung** [Ben98]. **Anwendungsbeispielen** [BH95]. **Application** [Ari89, Baj86, CTZY90, CD82, CD87, EM87, Hol88, JM87, Kwo91, MR85a, MR85b, SH84, VGT90, YP91, BF72, Fat15, HFO94, KoTRLoE77, yS88, Wan91]. **Applications** [AM89, ET89, GKW03, Har84, MAC84, HT90b, HN83, IEE93, IEE88b, Mej84, Par86, Pav85a, Pav86, Wan94, BH95, HLTH94, NC79, Par84, Pav85b, PH86, Ran87, TD90, Ham89]. **Applied** [SCG88, Sua84, AP90, Akm88, HN83, PL87, Ran84]. **Approach** [FKM95, GBC92, RS85, HJL91]. **approaches** [GJK88]. **Approximate** [TT88, GHR10]. **Approximation** [CCF84]. **approximations** [Gil95]. **April** [Cal82, Cav85, IEE86, IEE88a, Mio90, WGM88]. **Arbeiten** [KLW90, KWW92]. **Arbitrary** [Fat76]. **Arising** [SH84, Deu93]. **Arithmetic** [Fat76]. **Arrow** [GD93]. **Articles** [SS73]. **Artificial** [IEE88b, IJC79, PH86, Nor91, WS91a, WS91b, WS92]. **ASAP** [BFBZ92]. **ask** [Mac97b, Mac98]. **ASME** [H$^+$91, KRB$^+$90, G. 86]. **Associated** [BH87, Rei81]. **astro** [DJ89]. **astro-geophysics** [DJ89]. **Asymptotic** [CCF84, Lo85, BT88, Ski93]. **Atlanta** [PEK91]. **Aufstellung** [RAKK88]. **August** [Ano80, IEE88c, IJC79, Jen74, KRB$^+$90, Ros74, Wan81, WN90]. **Australia** [GE94]. **Austria** [Cav85]. **Automated** [Gen77, HJL89, LH84, LH86, MD88, Gen79, SS84]. **Automatic** [GE94, JL94, LG86, Mår86, Mac83, Pow84, SR88, Wan71a, Gat84, Sla61, GE94]. **automating** [Cre90b]. **Automation** [IEE86, IEE88a, Dic20, SDF88]. **Autonomous** [LMR90]. **available** [Way90]. **averaging** [CR91]. **axes** [BFMS87].

AXIOM [Ben98, Ben98, Grä96].

b [GM82]. **Band** [IL88]. **Based** [Meh86, BSZ93, Fav79, GW84, GJK88, Kow86, SR90]. **beam** [Cre90a, LHC92, TYL89]. **bearing** [HT90b]. **Beijing** [IEE88c]. **Bending** [Ban84, SC87]. **Bergmann** [TM85]. **Berkeley** [F$^+$77, FFF$^+$84]. **Bernoulli** [TYL89]. **Bessel** [SC90]. **Best** [Sto84]. **between** [fHR93]. **Bibliography** [SS73, Sym87b]. **Biennial** [H$^+$91]. **Bifurcation** [HT84, Mag89, RA87]. **Biomathematics** [Mej84]. **Bodies** [Mac83]. **Body** [JM85, MR85a, MR85b]. **Bonn** [Wat91]. **book** [RCF98]. **Books** [SS73]. **Bordeaux** [Fli93]. **Boson** [ANGK$^+$87]. **Boston** [KRB$^+$90]. **Boundary** [SH84, TG90, CS90, Mae87]. **boundary-value** [Mae87]. **Brighton** [IEE93].

c [GM82, Mår86, SH10]. **CA** [Nel89]. **CAD** [Ear88]. **Calcul** [DST87, Sir70]. **calculating** [WS88]. **Calculation** [Koe93, CHW91, JL94]. **Calculations** [Wol79, HN83]. **calculus** [DST87, Fel98, BIG01, Sir70, Sla61, TM89]. **California** [AAC93, Ano80, F$^+$77, FFF$^+$84, IEE88b, Pet71, IEE86, IEE92a]. **can** [Mac97b, Mac98]. **cantilever** [Cre89]. **Capabilities** [Fel96, Pav85a, Pav86, Fat71, Pav85b]. **Capri** [IEE92b, Mio90]. **Case** [JM85, Nor91]. **CDC** [Str74]. **celestial** [CD02]. **Centre** [IEE93]. **centroids** [Mat89a]. **changes** [LHC92]. **Channel** [EM87]. **chaos** [Una88]. **Characterization** [FF81]. **Chebyshev** [EF89]. **chemically** [HCR91]. **chemistry** [PH86]. **Chicago** [G. 86]. **China** [IEE88c, IEE88c]. **Ciocco** [Ear88]. **circuit** [SDF88]. **Circular** [BFHS92, BFMS87, Fra84]. **Civil** [Top89, Top89]. **Civil-Comp** [Top89]. **class** [Mos69]. **Classical** [CD02]. **Clebsch** [Dra01]. **Clifford** [TM89]. **Closed** [BBR85, Man93, SC90, Fab93, TRC92, WH84b]. **Closed-Form** [BBR85, SC90, WH84b]. **closed-loop** [Fab93]. **Closure** [Rei81]. **CMS** [HNS87]. **Coalescing** [CCF84]. **coaxial** [fHR93]. **Code** [GW84, LG86, SR84, Ari89, BGV94, CS87, CS89, Gat84, Mår86, SR88]. **Coded** [Dic20]. **codes** [Cah90, RAKK88, RAKK88]. **coding** [Mar71b]. **coefficients** [Dra01]. **collaborative** [Sny17]. **collection** [GM82, Tha89a, Tha89b]. **college** [Tha89a, Tha89b]. **Colloquium** [TMH99]. **column** [CVG94]. **Combination** [IL88]. **Combining** [Wan85]. **Comfortable** [Ano95a]. **Common** [BFHS92, BFMS87, Nor91]. **Comp** [Top89]. **Comparative** [JM85, CVG94]. **Comparison** [KSB92, NW83, SP93, TS00, GJK88]. **Competition** [Gra94]. **Complex** [BS84, HN85, KoTRLoE77, Ray88]. **composite** [KSB92, NNM91]. **Compressable** [CS79]. **comprise** [CVG94]. **Computation** [ACM89, ACM94, BHY88, Cha86, CDW90, Cre90b, DST88, SCG88, HCR91, Ous91a, Ous91b, PK88, Ros85, TMH99, VGT90, Wan81, WN90, Wat91, Wol85, Bau88, BKK76, CS90, Cre90a, HLTH94, KoTRLoE77, Lan88, LS96, Mio90, NC79, Ng79, OA89, OA91, Ran88, Sre92, Tob71, TM85, TS00, VT92, Wan71a, War90, YW87, Wan92]. **Computational** [Ber84, Gol84, Meh86, Wan85, PEK91]. **computations** [BMM90, CRDMBR19, Her88]. **compute** [Mat89a]. **Computer** [AP90, Bre84, Cal82, Cav85, DST88, DJ89, Fat81, GCL92, BIG01, GKW03, HWH91, HSW94, HSW98, HN85, ILT87, Jen84, Koe92, KLW90, KWW92, Lan89, Mac83, Mar71a, NMM90, Pav85c, Pav86, Ran84, Ran87, Rei81, Sua84, TH94, WS91a, WS91b, WS92,

Wes99, YP91, van82, Ari89, Ben98, CHW91, CTZY90, Che88, DS81, Ear88, ET88a, ET88b, Fat15, FP95, GJK88, HT90b, LR08, Mat89b, MT94, Nel89, PF95, RM76, RA87, Ran94, Roe95, Sir70, SH10, Way90, Cal82, Gen83, Hei87, HSW83, MS91, Nel89, Sch84]. **Computer-Aided** [Rei81, DJ89, ET88a, ET88b, GJK88]. **Computer-Algebra-Systemen** [KLW90]. **Computer-supported** [BIG01]. **Computeralgebra** [Ben98]. **Computeralgebra-Systemen** [Ben98]. **Computerized** [NA79, Cre89]. **Computers** [Bar90, Dev94a, Dev94b, Dev94c, G. 86, KRB+90, Sym86b, KRB+90]. **Computing** [CS79, CF80, CG90, Dek83, JS87, Man93, Top89, AM89, DM93, Dra01, ET88a, ET88b, Sny17, WGM88]. **concentrated** [Fra84]. **concept** [WS83]. **conduct** [Dic20]. **cones** [BFMS87]. **Conference** [AAC93, Ano80, Cal82, Cav85, F+77, GH84, Gra94, G. 86, H+91, IEE93, IEE86, IEE88b, IEE88c, IEE88a, IEE91, IEE92a, IEE92b, IJC79, KRB+90, Lew79, Top89, Ano80, IEE92a]. **conferences** [H+91]. **Congress** [GE94, Nel89, Ros74]. **Congruent** [BFHS92, BFMS87]. **Connected** [Mac83]. **Considerations** [Lue77]. **constitutive** [TDA88]. **constraints** [TM85]. **Constructing** [Gil95]. **Construction** [CDA90, Her83, Wan79]. **Consultant** [Gen77]. **consultation** [Gen79]. **Contribution** [Sir70, Sir70]. **Contributions** [Cav85]. **Control** [AAC93, BMS88, GE94, ILT87, ML87, RH86, TMH99, ABC+88, ET88a, ET88b, ET89, Fli93, GFB+93, HLTH94]. **Controlled** [WKB86, Fab92, Fab93]. **controller** [LS96]. **controls** [SS84]. **Convection** [Mag89, TTDD91]. **converter** [GFB+93]. **converter-machine** [GFB+93]. **Corrections** [Cel84]. **Coulomb** [BBR85]. **coupled** [Her91]. **courses** [TH94]. **crack** [KSB92, LHC92]. **crack-induced** [LHC92]. **Criteria** [Yag84]. **criterion** [Una88]. **Critical** [NMM90]. **Crow** [CVG94]. **CTRL** [Mår86]. **CTRL-C** [Mår86]. **Current** [Pad85, Raj87]. **Cybernetics** [IEE88c]. **cyclically** [MSI90]. **Cylinders** [BFHS92, fHR93]. **Cylindrical** [Ban84, SP93].

dame [Way90]. **Data** [CS79, Whi77a, Whi77b]. **Databases** [LMR90]. **DC** [Lew79]. **Decade** [Mos71d, Mos71b]. **December** [PEK91, SS84]. **Decoupling** [CD82]. **Definite** [Wan74, Wan71b, Wan71c]. **definition** [MSI90]. **Deformation** [Ban84]. **Degenerate** [RK87]. **Degree** [HT84]. **Demonstrations** [DS81]. **Derivation** [LH84, LH86, MD88, DJ89, TDA88, WS92]. **DERIVE** [Ben98, Ben98, KLW90, KWW92]. **Describe** [GBC92]. **Design** [Cha88, CFG+84, GE94, ILT87, SK86, ABC+88, AM90, BSZ93, BFBZ92, ET88a, ET88b, ET89, Fli93, Gat84, HJL89, HLTH94, H+91, LS96, SDF88, Mio90]. **Determinacy** [RK87]. **Determining** [Mar71b]. **Development** [Pad85, Raj87]. **Diagram** [Wol79]. **Diego** [IEE88b]. **Difference** [Yag84, SR88]. **Differential** [Har84, HV87, Her83, Mil93, Ous91a, RW86, Rei81, WH84a, Woo84, Bey79, CHW91, CG90, Gol77a, GHR10, Kwo91, Mat89b, RB91]. **Differentiation** [Gol85, Wan94, WS84, JL94, WS83]. **Difficulties** [Wan82]. **Diffusive** [Mag89]. **Dimensional** [Eng84, Wel72]. **Dirac** [BBR85, TM85]. **direct** [HT90a]. **directed** [RB91]. **Directions** [JS87]. **DISCO** [Mio90]. **discontinuities** [AP90]. **Discrete** [NTT90, CDA90]. **Discrete-time** [NTT90]. **dispersion** [RAKK88]. **Dispersionsgleichung** [RAKK88]. **Disturbances** [LF87]. **DMS** [BR73]. **document** [Sny17]. **documentation** [GM82]. **DOE** [HC85]. **DOE-MACSYMA**

[HC85]. **Double** [JM88, Mag89, TRC92]. **Double-Diffusive** [Mag89]. **double-spiral** [TRC92]. **Drinfeld** [ACLM23]. **Driven** [WKB86]. **drives** [GFB+93]. **drudgery** [Str90]. **Dynaman** [SK86]. **Dynamic** [LH84, LH86, MD88, NTT86, GJK88, LS96]. **Dynamical** [HN85, Ous91b, Una88]. **Dynamics** [JM85, Meh86, Cre90a, Cre90b, H+91, Ran94].

easy [GM82]. **economy** [War90]. **editing** [Sny17]. **Editor** [Pai92]. **Educating** [Gra94]. **Education** [Gra94, VT92]. **Efficient** [SC87]. **eigenfrequency** [LHC92]. **eight** [SP93]. **Einführung** [BH95]. **elastic** [TT88]. **electromagnetics** [Ari89, TS00]. **Electromechanical** [GBC92]. **Electronics** [IEE93]. **Element** [SC87, Wan84, H+91]. **elementary** [FP95, PF95, Ric68, Rit48]. **elements** [CTZY90, CS90]. **Elimination** [Bey84, Mos66a]. **Elliptic** [TG90, CR91]. **Encyclopedia** [RM76]. **Engine** [WKB86]. **Engineering** [IEE92b, Pav85a, Pav86, Top89, ABC+88, G. 86, HSW94, KRB+90, Lan88, Lan89, Nel89, OA89, OA91, Pav85b, TD90, TH94, War90, Ben98]. **Engineers** [Gra94, PEK91, SS84]. **engines** [RAKK88]. **England** [ACM94, Top89]. **enhance** [TH94]. **Enhancement** [Ray88]. **Enumeration** [Del91]. **Environment** [BS84, Ber84, Pur85, Ray88, Sre92]. **Environments** [ACM85, Car84]. **Equation** [Mil93, Rei81, WH84a, CP92, Gol77a, TD90, TYL89]. **Equations** [Bey84, Har84, HV87, Her83, HN85, LH84, LH86, Mac83, MD88, RW86, Woo84, Yag84, Bey79, CDA90, CHW91, DJ89, Fod78, Fra84, GHR10, HT90a, Her91, Kwo91, Mat89b, Mos66a, RB91, RAKK88, TDA88, TV89, WH84b]. **Equilibria** [RK87]. **equivalence** [Mar71b]. **Equivalent** [HN85]. **Error** [VGT90, BMM90]. **error-free** [BMM90]. **Errors** [Cel84]. **estimators** [BT88]. **Euler** [TYL89]. **EUROCAL** [Cav85, Buc85]. **EUROCAM'82** [Cal82]. **Europa** [IEE92b]. **European** [Cal82, Cav85, IEE93]. **EUROSAM** [Ng79, Jen74]. **evaluate** [Lun86]. **Evaluating** [Cut84]. **Evaluation** [Wan71b, Wan71c, Wan74, Str74]. **evolution** [HT90a, Her91]. **Exact** [Her91, CDA90, Roe95]. **Examples** [Koe93]. **exchanger** [TRC92]. **Excitation** [IL88]. **excited** [Cha92]. **executing** [Lan80]. **Executive** [Spi86]. **executor** [Fav79]. **Exhibition** [G. 86]. **expansion** [Nei80]. **expansions** [Ski93]. **experiences** [CVG94]. **Experimental** [Cha88]. **Experiments** [LG86]. **'expert** [Lan87, BT88, Cla90, Ham89, ILT87, KWW92, Raj87]. **Expertensysteme** [KWW92]. **explained** [GM82]. **Exposition** [KRB+90]. **expression** [Sas86]. **Expressions** [BBR85, Bre84, Mar71a, Mar71b, Str74, SC90]. **extension** [PI64, WS83]. **EZ** [MY73].

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S [YW87]. **Saddle** [CCF84]. **SAGE** [Den13]. **SageMath** [ACLM23, CRDMBR19, KM19]. **sagemath.org** [Den13]. **SageMathCloud** [Sny17]. **SAINT** [Sla61]. **sample** [BH95, SH10]. **San** [AAC93, IEE86, IEE88b, IEE92a, Nel89]. **Schenectady** [GH84]. **SCHOONSCHIP** [Str74]. **Schrödinger** [CP92]. **Science** [Hei87, HSW83, WGM88, Gen83, IEE92a, RM76]. **Sciences** [Pav85a, Pav86, Pav85b]. **scientific** [Sny17]. **SCRATCHPAD** [And84, Jen84]. **Seattle** [ACM85]. **Second** [Mil93, Pet71, CVG94, Mat89b]. **section** [Mat74]. **SEKE** [IEE92b]. **selected** [Fli93]. **selection** [BSZ93]. **self** [Cha92]. **self-excited** [Cha92]. **semantic** [Fat71]. **SENAC** [SB89]. **sensitivities** [Fab93]. **Sensitivity** [JM87]. **Sensors** [SS84]. **Sep** [Top89]. **separated** [DM88, DM93, OM92]. **September** [H+91, IEE93]. **Series** [Koe92, Koe93, Ous91b, EF89]. **Server** [FKM95]. **sessions** [Nel89]. **seven** [Pro74]. **Share** [HC85]. **Shell** [Ban84]. **shells** [SP93]. **Shenyang** [IEE88c]. **Sheraton** [IEE88b]. **Shock** [Ano84]. **SIGPLAN** [ACM85]. **SIGSAM** [ACM89]. **Simplification** [Mos71c, Sas86, HSW94, HSW98, Mos71a]. **Simplifying** [Bre84]. **Simulation** [GBC92, JM87, JM88, MSI90, GFB+93, JL94, Sre92]. **simulations** [Cah90]. **Simultaneous** [Bey84]. **Singapore** [IEE91]. **Singer** [Man93]. **single** [Har05]. **singular** [CG90]. **Sixth** [IJC79]. **Slater** [SC90]. **Slater-type** [SC90]. **sliding** [LS96]. **SMP** [Wol84]. **Snowbird** [Wan81]. **Society** [PEK91, SS84]. **soft** [Hol88]. **Software** [Ano95b, Den13, GBC92, GE94, IEE92b, Bra89, CVG94, Pet88, Str90, KLW90]. **softwares** [GFB+93]. **Softwaresysteme** [KLW90]. **solid** [CS90]. **Solitary** [HT90a, Her91]. **Solution** [Bey84, RH86, Che88, CP92, RAKK88, Ris70, Roe95, TYL89]. **Solutions** [Her83, Man93, Mil93, Mos66a, PL87, TRC92, WH84a, CDA90, CG90, Fra84,

HT90a, Her91, Kwo91, Roe95, WH84b]. **Solvability** [Baj86]. **solve** [Grä96]. **solver** [Gol77a, OM92, TD90]. **solvers** [SR90]. **solves** [Sla61]. **Solving** [Cel84, EM87, Har84, Ivi78, Mae87, TG90, GHR10, Ivi77, Kow86, Str90]. **Some** [Cel84, Her83, Hol86, Ivi77, Ivi78, Mej84, Ric68, Wan94, WH84a, CDA90, PL87, WH84b]. **Source** [Den13, LR08]. **space** [GD93]. **sparse** [Zip79]. **spatial** [AM90]. **Special** [Mos72, Mos69]. **spectral** [DJ89, Her88]. **speed** [OM92]. **spherical** [DJ89, TTDD91]. **spiral** [TRC92]. **Spreadsheets** [CVG94]. **St** [AAC93]. **Stability** [MR85a, MR85b, WKB86, Yag84]. **Stamford** [IEE91]. **standard** [RB91]. **Stanford** [Ano80]. **State** [ANGK+87, MD88]. **statics** [Mat89a]. **station** [GD93]. **statisticians** [Hel91]. **Statistics** [Dek83, Hei87, HSW83, WGM88, Gen83]. **Steiner** [BH87]. **Stimulation** [JM87]. **Stochastic** [RH86]. **Stockholm** [Jen74, Ros74]. **Stormy** [Mos71d, Mos71b]. **Stratified** [YP91]. **stress** [HFO94]. **Structural** [IL88, NA79, Top89, Nel89]. **Structures** [CS79, Nel89, Fab92, Fab93, LHC92]. **Studies** [JM85, Nor91]. **Study** [Ear88, JM85, Hol88, LHC92]. **subexpressions** [Fat15]. **subjected** [HFO94]. **Subroutines** [SR86]. **Summations** [Wan94, Wan91]. **sums** [Gos77]. **Support** [JM88, Pur85]. **supported** [BIG01]. **Surfaces** [FKM95]. **Survey** [WS84]. **Swallowtail** [CCF84]. **Sweden** [Jen74, Ros74]. **switching** [MSI90]. **Sydney** [GE94]. **Symbod** [Mac83]. **Symbol** [PT60, Mat89a]. **Symbolic** [ACM89, ACM94, BHY88, Bau88, BKK76, CS79, CF80, Cha86, CD87, Cre90b, Dek83, ET88a, ET88b, SCG88, Her88, Lan88, LH84, LH86, LS96, Mac83, MD88, Mar67a, Mar67b, Mej84, Mos66c, Mos66b, Mos67a, Mos67b, Mos71b, Mos71d, Ng79, NA79, Pet71, TDA88, Tob71, TMH99, TYL88, VGT90, Wan74, Wan81, Wan85, Wan92, War90, WN90, Wat91, WS84, Wol85, ABC+88, AM89, Bey79, BFBZ92, Cha92, CTZY90, CP92, Cre89, Cre90a, DM93, ET89, Fat15, Fav79, GFB+93, HFO94, HLTH94, Hol88, Lo85, Mar87, Mio90, OA89, OA91, Pai92, Pet88, Ran88, SDF88, Sla61, Str74, TD90, TTDD91, TS00, VT92, Wan71b, Wan71c, YW87, Ng79]. **Symbolically** [Mil93]. **SymbolicC** [SH10]. **symmetric** [Far89]. **symmetrically** [BFMS87]. **symmetries** [CHW91, Ros85]. **Symposium** [ACM85, ACM89, ACM94, Ano84, Cha86, Gen83, Ham89, Hei87, HSW83, ML87, Mio90, Ng79, Pet71, Wan81, Wan92, WN90, Wat91, WGM88, Fli93]. **Symsac** [Cha86, Wan81]. **SYMSAM** [Pet71]. **SYMTOM** [TH90]. **Syntactic** [Mur85]. **synthesis** [DM88, DM93]. **System** [CFG+84, Cla90, Den13, Fab92, ILT87, Jen84, KWW92, MF71, Woo84, BT88, Che88, ET88a, ET88b, ET89, FP95, Grä96, GJK88, HFO94, HLTH94, JL94, LR08, Mac93b, Mac95b, Mat89b, PF95]. **Systematic** [LG86]. **Systemen** [Ben98, KLW90]. **systèmes** [DST87]. **systemnahe** [BH95]. **Systems** [BMS88, CD82, DST88, GBC92, GKW03, Ham89, HWH91, Har84, HT84, HN85, IEE88c, JM85, KWW92, Lue77, Mac83, MD88, Meh86, Ous91b, Pav85c, Raj87, WH84a, van82, AM89, AM90, Ben98, CHW91, CG90, DST87, Fat87, Fat15, Fli93, HSW94, HSW98, Hol86, KLW90, Lan87, MSI90, Mio90, Mos66a, RB91, TM85, TH94, TYL89, Una88, WS91a, WS91b, WS92, Wes99, YW87].

takes [CVG94]. **Taking** [Str90]. **teach** [Mat89b, PF95]. **Teaching** [FP95, Lan89, TH94]. **technical** [H+91]. **Techniques** [Wan85, PEK91, TD90, TS00]. **Technology** [Jen74, IEE92a, TH94]. **Ten** [Mat83b]. **Terms**

[AG87, Rit48, Ris69, Ris70]. **Test** [HV87, Mon92]. **Testing** [Pow84]. **Texas** [Gen83]. **their** [BF72, Ben98, RB91]. **Theoretical** [LHC92, Ear88]. **theories** [Cah90, Far89]. **Theory** [ANGK+87, Ham89, Mos72, Wan74, Bey79, CDA90, FP95, HFO94, HSW98, PF95, RA87, Rit48, SP93]. **thick** [Far89, NNM91]. **Threaded** [PT60]. **Three** [CVG94, Eng84]. **til** [MH83]. **time** [NTT90]. **Tips** [Mac97b, Mac98]. **tissues** [Hol88]. **Tokyo** [IJC79, WN90]. **Tool** [Pur85, SK86, SDF88]. **toolkit** [Wan91]. **Tools** [Wol79]. **Top** [Coo84]. **Top-Level** [Coo84]. **Topics** [Ran94]. **topology** [CRDMBR19]. **tori** [Gil95]. **torus** [KoTRLoE77]. **Tower** [IEE86]. **trajectories** [KoTRLoE77]. **Transfer** [BHY88, Che88, PEK91]. **Transform** [Cla89b, Cla89a, CP92, SC90]. **Transformations** [CD87, Deu93]. **Transient** [HFO94]. **Translator** [Pit79]. **transversely** [Far89]. **Tree** [BH87]. **Triebwerken** [RAKK88]. **Triennial** [GE94]. **Tutorial** [Dri84, Whi77a, Fel98]. **Twenty** [Gra94]. **Twenty-Fourth** [Gra94]. **Two** [BFHS92, CD87, Eng84, BFMS87, CVG94, Wel72]. **two-dimensional** [Wel72]. **two-part** [CVG94]. **type** [Che88, SC90]. **Typesetting** [Fod78].

Überlegungen [Lue77]. **UK** [IEE93]. **undecidable** [Ric68]. **undergraduate** [Lan89]. **undergraduates** [Lan88]. **Unexpected** [Car84]. **Uniform** [CCF84]. **uninitiated** [Bau88]. **United** [ACM94]. **Univariate** [Mon92, Wan79]. **University** [Ano80, FFF+84]. **UNIX** [SM85, FG80, Fat82b, Mat80, GF80, Sym85b, Fre81]. **unknown** [Gol85]. **Unsteady** [fHR93]. **Untersuchung** [RAKK88]. **USA** [Lew79, ACM89]. **usage** [DCC85, DeL87]. **Use** [NMM90, OA89, OA91, Ran88, TG90, VT92, Ben98, BH95, Cah90, Cre90b, GFB+93, Lan87]. **User** [F+77, GH84, Lew76a, Spi86, SS73, Sym87a, Sym88a, van82, Ano88, Ano92, Fat71, Gol77b, Gol79, GM82, Gol82, Lew75, Lew76b, Lew78, Mac95a, Mac95c, YW87]. **User-Friendly** [Spi86]. **user-level** [Fat71]. **Users** [Lew79, Dic20]. **Uses** [Dri84]. **Using** [BR73, Cha88, Cut84, Del91, GBC92, SCG88, HT84, HN85, JM85, Lun86, Man93, Mat89b, Mat89a, PF95, RK87, RS85, SR84, SR86, SR90, CDA90, Cha92, Che88, CS90, CP92, CR91, DM93, Gil95, HT90a, Her91, MSI90, PK88, PL87, Ran87, RB91, Roe95, Ros85, SH10]. **Utah** [Wan81]. **Utilization** [Bra89, Nel89].

Value [SH84, TG90, Mae87]. **variable** [Har05, Ric68]. **Variables** [CD87, Wan94]. **Variational** [RS85]. **variations** [SP93]. **Vassallo** [CVG94]. **VAX** [FG80, Fat82a, Fat82b, FF81, Fre81, Mat80, GF80, SM85]. **VAX/** [Fre81]. **VAX/UNIX** [FG80, Fat82b, Mat80, GF80]. **VAX/VMS** [Mat80]. **VAXIMA** [BS84, FG80, Gat84, SR84, Nei80, NW83, Pow84, Wan82, YW85]. **venue** [IEE93]. **Verified** [Roe95]. **Version** [Bog83, BH95, Mat77, Mat83b, Mac97b, The83a, The83b, BGGD77, Mac98, Mat80, Pro74, HNS87]. **via** [TV89]. **Vibration** [Ano84, H+91]. **Vibrations** [RDBE87, H+91]. **Viewed** [van82]. **Virginia** [WGM88]. **viscous** [OM92]. **Visualization** [FKM95]. **VMS** [Mat80]. **Vol** [Buc85]. **Vol.2** [GE94]. **Volume** [BFHS92, Cav85, The83a, The83b, BFMS87, SR90].

Waals [ANGK+87]. **Washington** [ACM85, Lew79]. **Waterloo** [Cha86]. **wave** [BKK76, CHH91, HFO94, HT90a, Her91]. **wedge** [Che88]. **wedge-type** [Che88]. **Westin** [AAC93, IEE91]. **Which** [Sto84, Ous91b]. **whose** [BFMS87]. **Wide** [IL88]. **Wide-Band** [IL88]. **Windows** [Ano95a, Mac98]. **Winter** [PEK91, SS84]. **within** [TTDD91]. **without** [CF80]. **word**

[Mac98]. **words** [Mac97b]. **Work** [KWW92, KLW90]. **Workstations** [Wan85, PEK91, TTDD91]. **World** [GE94, Gra94]. **Write** [SR84, SR86, Cah90, SR90].

Year [Mos74]. **Years** [Wol84]. **York** [GH84].

zur [KLW90, Lue77, RAKK88].

References

AACC:1993:PAC

[AAC93] AACC, editor. *Proceedings of the 1993 American Control Conference: The Westin St. Francis Hotel, San Francisco, California, June 2–4, 1993*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993. ISBN 0-7803-0861-1. LCCN TJ 212.2 A44 1993. Three volumes.

Akhrif:1988:ISN

[ABC+88] O. Akhrif, G. L. Blankenship, P. Chancelier, C. Gomez, J. P. Quadrat, and A. Sulem. Integration of symbolic and numerical processing in control engineering design. In IEEE, editor, *Digest of Papers: Compcon Spring '88. Thirty-Third IEEE Computer Society International Conference, 29 February – 3 March 1988, Cathedral Hill Hotel, San Francisco, California*, pages 482–485. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN 0-8186-0828-5. LCCN QA75.5 .C58 1988.

Ayotte:2023:DMS

[ACLM23] David Ayotte, Xavier Caruso, Antoine Leudière, and Joseph Musleh. Drinfeld modules in SageMath. *ACM Communications in Computer Algebra*, 57(2):65–71, June 2023. CODEN ???? ISSN 1932-2232 (print), 1932-2240 (electronic). URL `https://dl.acm.org/doi/10.1145/3614408.3614417`.

ACM:1985:PAS

[ACM85] *Proceedings of the ACM SIGPLAN 85 Symposium on Language Issues in Programming Environments: papers presented at the symposium in Seattle, Washington, 25–28 June, 1985*. ACM Press, New York, NY, USA, 1985. ISBN 0-89791-165-2. LCCN QA76.7 .S54 v.20:7. US$21.00. Published in ACM SIGPLAN notices, volume 20, number 7.

ACM:1989:PAI

[ACM89] ACM, editor. *Proceedings of the ACM-SIGSAM 1989 International Symposium on Symbolic and Algebraic Computation, ISSAC '89, 17–19 July 1989, Portland, OR, USA*. ACM Press, New York, NY, USA, 1989. ISBN 0-89791-325-6. LCCN Math QA155.7.E4 I68 1989.

ACM:1994:IPI

[ACM94] ACM, editor. *ISSAC '94: Proceedings of the 1994 International Symposium on Symbolic and Algebraic Computation: July 20–22, 1994, Oxford, England, United Kingdom*. ACM Press, New York, NY, USA, 1994. ISBN 0-89791-638-7. LCCN QA76.95.I59 1994.

Atallah:1987:NOM

[AG87] George C. Atallah and James Geer. Non-linear oscillations with multiple forcing terms. *International Journal of Non-Linear Mechanics*, 22(6):439–449, 1987. CODEN IJNMAG. ISSN 0091-4037.

Akman:1988:GGA

[Akm88] Varol Akman. Geometry and graphics applied to robotics. In Earnshaw [Ear88], pages 619–638. ISBN 0-387-19506-8. LCCN T385 .N3741 1987.

Ashrafiuon:1989:ASC

[AM89] H. Ashrafiuon and N. K. Mani. Applications of symbolic computing for numerical analysis of mechanical systems. *American Society of Mechanical Engineers, Design Engineering Division (Publication) DE*, 19-3(pt 3):141–149, 1989. CODEN AMEDEH.

Ashrafiuon:1990:AOD

[AM90] H. Ashrafiuon and N. K. Mani. Analysis and optimal design of spatial mechanical systems. *Journal of Mechanisms, Transmissions, and Automation in Design*, 112(2): 200–207, June 1990. CODEN JMTDDK. ISSN 0738-0666.

Andrews:1984:RS

[And84] George E. Andrews. Ramanujan and SCRATCHPAD. In Golden and Hussain [GH84], pages 383–??

Aguilera-Navarro:1987:VWP

[ANGK+87] V. C. Aguilera-Navarro, R. Guardiola, C. Keller, M. de Llano, M. Popovic, and M. Fortes. Van der Waals perturbation theory for Fermion and Boson ground-state matter. *Phys. Rev. A*, 35(9):3901–3910, May 1, 1987. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

Anonymous:1975:MP

[Ano75] Anonymous. *MACSYMA primer*. Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, 1975. 22 pp.

Anonymous:1978:MP

[Ano78] Anonymous. *MACSYMA primer*. Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, revised edition, 1978. 25 pp.

Anonymous:1980:CRL

[Ano80] Anonymous, editor. *Conference record of the 1980 LISP Conference: papers presented*

at Stanford University, Stanford, California, August 25–27, 1980. ACM Press, New York, NY, USA, 1980. LCCN QA76.73.L23 L56 1985.

Anon:1984:SSV

[Ano84] Anon. 54th symposium on shock and vibration. *Shock and Vibration Bulletin*, June 1984. CODEN SVBUA4.

Anonymous:1988:MUG

[Ano88] Anonymous. *MACSYMA user's guide*. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA, 1988. ix + 258 pp.

Anonymous:1992:MUG

[Ano92] Anonymous. *MACSYMA user's guide*. Macsyma, Inc., Arlington, MA, USA, 1992. ix + 258 pp.

Anonymous:1995:MKP

[Ano95a] Anonymous. Mathematik — komfortabel und preiswert: Macsyma 2.0 für Windows. (German) [Mathematics — comfortable and inexpensive: Macsyma 2.0 for Windows]. *Elektronik*, 44(5):154–??, 1995. CODEN EKRKAR. ISSN 0013-5658.

Anonymous:1995:SF

[Ano95b] Anonymous. Software forum. *Design news*, 50(8):134–??, April 24, 1995. CODEN DIGNAO. ISSN 0011-9407.

Anonymous:1997:M

[Ano97] Anonymous. *Macsyma*. Jones and Bartlett, Boston, MA, USA, 1997. ISBN 0-7637-0379-6 (container) 0-7637-0505-5 (booklet). LCCN QA76.95. CD-ROM and booklet.

Abouzahra:1990:CAA

[AP90] M. D. Abouzahra and R. Pavelle. Computer algebra applied to radiation from microstrip discontinuities. *Journal of Symbolic Computation*, 10(5):525–528, November 1990. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Ari:1989:ACC

[Ari89] N. Ari. Application of computer code MACSYMA for electromagnetics. In Hamza [Ham89], pages 77–80. ISBN 0-88986-119-6. LCCN ????

Bajaj:1986:PGA

[Baj86] Chanderjit Bajaj. Proving geometric algorithm nonsolvability: An application of factoring polynomials. *Journal of Symbolic Computation*, 2(1):99–102, March 1986. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Bannister:1984:MLD

[Ban84] Kenneth A. Bannister. MACSYMA-aided large deformation analysis of a cylindrical shell under pure bending. In Golden and Hussain [GH84], pages 140–??

Barwise:1990:CM

[Bar90] Jon Barwise. Computers and mathematics. *Notices Amer. Math. Soc.*, 37(1):7–??, January 1, 1990. CODEN AMNOAN. ISSN 0002-9920 (print), 1088-9477 (electronic).

Bau:1988:SCI

[Bau88] H. H. Bau. Symbolic computation — an introduction for the uninitiated. *American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD*, 105:1–10, 1988. CODEN ASMHD8. ISSN 0272-5673.

Bessis:1985:CED

[BBR85] N. Bessis, G. Bessis, and D. Roux. Closed-form expressions for the Dirac–Coulomb radial r^t integrals. *Phys. Rev. A*, 32:2044–2050, 1985. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

Benker:1998:ICS

[Ben98] Hans Benker. *Ingenieurmathematik mit Computeralgebra-Systemen: AXIOM, DERIVE, MACSYMA, MAPLE, MATHCAD, MATHEMATICA, MATHLAP und MuPAD in der Anwendung. (German) [Engineering mathematics with computer algebra systems: AXIOM, DERIVE, MACSYMA, MAPLE, MATHCAD, MATHEMATICA, MATHLAP and MuPAD in their use]*. Friedrich Vieweg und Sohn, Braunschweig, Germany, 1998. ISBN 3-528-05673-8. xiii + 439 pp. LCCN ????

Berman:1984:MPC

[Ber84] Robert H. Berman. Measuring the performance of a computational physics environment. In Golden and Hussain [GH84], pages 244–??

Betts:1990:MPM

[Bet90] Kellyn S. Betts. Math packages multiply. *Mechanical Engineering-CIME*, ??(??):??, August 1990.

Beyer:1979:LGT

[Bey79] W. A. Beyer. Lie group theory for symbolic integration of first order ordinary differential equations. In Lewis [Lew79], pages 362–384.

Beyer:1984:SSP

[Bey84] William A. Beyer. Solution of simultaneous polynomial equations by elimination in MACSYMA. In Golden and Hussain [GH84], pages 110–??

Barton:1972:RAM

[BF72] D. Barton and J. P. Fitch. A review of algebraic manipulative programs and their application. *The Computer Journal*, 15(4):362–381, November 1972. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL `http://www3.oup.co.uk/computer_journal/hdb/`

Volume_15/Issue_04/150362.sgm.abs.html.

Bozoki:1992:ASA

[BFBZ92] Eva Bozoki, Aharon Friedman, and Ilan Ben-Zvi. ASAP — a symbolic algebra package for accelerator design. In IEEE [IEE92a], pages 272–274. ISBN 0-7803-0135-8. LCCN QC786 .N301 1991. Five volumes. IEEE catalog no. 91CH3038-7.

Beyer:1992:VCT

[BFHS92] W. A. Beyer, L. R. Fawcett, L. P. Harten, and B. K. Swartz. The volume common to two congruent circular cylinders. *Journal of Symbolic Computation*, 13(2):221–230, February 1992. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Beyer:1987:VCT

[BFMS87] W. A. Beyer, L. R. Fawcett, R. D. Mauldin, and B. K. Swartz. The volume common to two congruent circular cones whose axes intersect symmetrically. *Journal of Symbolic Computation*, 4(3): 381–390, December 1987. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Bogen:1983:MRMa

[BG83] Richard Bogen and Jeffrey Golden. *MACSYMA reference manual*. Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, version 10, first printing edition, 1983. ?? pp.

Bogen:1977:MRM

[BGGD77] Richard Bogen, Jeffrey Golden, Michael Genesereth, and Alexander Doohovskoy. *MACSYMA reference manual: version nine*. Massachusetts Institute of Technology, Cambridge, MA, USA, 1977. v + 308 + x pp.

Borst:1994:GRP

[BGV94] W. N. Borst, V. V. Goldman, and J. A. Van Hulzen. GENTRAN 90: a REDUCE package for the generation of Fortran 90 code. In ACM [ACM94], pages 45–51. ISBN 0-89791-638-7. LCCN QA76.95.I59 1994. URL http://www.acm.org:80/pubs/citations/proceedings/issac/190347/p45-borst/.

Beyer:1987:STA

[BH87] W. A. Beyer and L. Heller. A Steiner tree associated with tree quarks. *Journal of Symbolic Computation*, 3(3): 283–289, June 1987. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Braun:1995:MVS

[BH95] Stefan Braun and Harald Häuser. *Macsyma Version 2: systemnahe und praxisnahe Einführung mit Anwendungsbeispielen. (German) [Macsyma Version 2: Hands-on*

practical use: Introduction with sample applications]. Addison-Wesley, Bonn, Germany, 1995. ISBN 3-89319-751-6. 439 pp. LCCN ????

Bau:1988:SCF

[BHY88] Haim H. Bau, Thorwald Herbert, and M. M. Yovanovich, editors. *Symbolic Computation in Fluid Mechanics and Heat Transfer*, volume 105 of *American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD*. American Society of Mechanical Engineers, 345 E. 47th St., New York, NY 10017, USA, 1988. CODEN ASMHD8. ISSN 0272-5673.

Gilbert:2001:CSC

[BIG01] Adi Ben-Israel and Robert P. Gilbert. *Computer-supported calculus*. Texts and monographs in symbolic computation. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2001. ISBN 3-211-82924-5. ISSN 0943-853X. x + 609 pp. LCCN QA303.5.D37 B46 2001.

Bers:1976:SCN

[BKK76] A. (Abraham) Bers, John Laurence Kulp, and C. F. F. (Charles F. F.) Karney. Symbolic computation of nonlinear wave interactions on MACSYMA. Plasma research report PRR 76/17, Massachusetts Institute of Technology, Research Laboratory of Electronics, Cambridge, MA, USA, 1976. 26 pp.

Baras:1990:FEA

[BMM90] John S. Baras, David C. MacEnany, and Robert L. Munach. Fast error-free algorithms for polynomial matrix computations. *Proceedings of the IEEE Conference on Decision and Control*, 2:941–946, 1990. CODEN PCDCDZ. ISSN 0191-2216. IEEE catalog number 90CH2917-3.

Byrnes:1988:ACN

[BMS88] Christopher I. Byrnes, Clyde F. Martin, and Richard E. Saeks, editors. *Analysis and Control of Nonlinear Systems*. North-Holland, Amsterdam, The Netherlands, 1988. ISBN 0-444-70496-5. LCCN Math QA402.3 .A541 1988. Selected papers from the 8th International Symposium on the Mathematics of Networks and Systems, held in Phoenix, June 15–19, 1987.

Bogen:1983:MRMb

[Bog83] Richard Bogen. *MACSYMA Reference Manual, Version 10*. Massachusetts Institute of Technology, Computer Science Lab., Cambridge, MA, USA, December 1983. 2nd Printing, Vol. I.

Bogen:1986:MRM

[Bog86] Richard Bogen. *MACSYMA reference manual*. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA,

version 12 edition, 1986. various pp.

Bhushan:1973:RUM

[BR73] A. Bhushan and N. Ryan. RFC 578: Using MIT-Mathlab MACSYMA from MIT-DMS Muddle, October 29, 1973. URL `ftp://ftp.internic.net/rfc/rfc578.txt`; `https://www.math.utah.edu/pub/rfc/rfc578.txt`.

Bratcher:1989:UMS

[Bra89] Kevin F. Bratcher. Utilization of the MACSYMA software for instructional programming. Thesis (m. eng.), Department of Mechanical Engineering, University of Louisville, Louisville, KY, USA, 1989. vii + 154 pp.

Brenner:1984:SLA

[Bre84] Richard L. Brenner. Simplifying large algebraic expressions by computer. In Golden and Hussain [GH84], pages 50–??

Baker:1984:PCN

[BS84] Johnnie W. Baker and Oberta Slotterberg. Providing a complex number environment for MACSYMA and VAXIMA. In Golden and Hussain [GH84], pages 39–??

Birk:1993:RSN

[BSZ93] J. Birk, J. Schaffner, and M. Zeitz. Rule-based selection of nonlinear observer design methods. In Fliess [Fli93], pages 231–238. CODEN ISYSEK. ISBN 0-08-041901-1. ISSN 0962-9505. LCCN TJ212.2 .N66 1993.

Buttarazzi:1988:ESA

[BT88] Berta Buttarazzi and Antonio Tornambe. Expert system for the asymptotic estimators. In IEEE [IEE88c], pages 1153–1156. ISBN 7-80003-039-3. LCCN TA 168 I19 1988. Two volumes.

Buchberger:1985:PEV

[Buc85] Bruno Buchberger, editor. *Proceedings of Eurocal '85, Vol. I*, volume 203 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1985. ISBN 0-387-15983-5. LCCN QA155.7.E4 E85 1985.

Cahill:1990:HUM

[Cah90] Kevin Cahill. How to use MACSYMA to write long FORTRAN codes for noncompact simulations of gauge theories. *Computers in Physics*, 4(2):159–165, March–April 1990. CODEN CPHYE2. ISSN 0894-1866 (print), 1558-4208 (electronic).

Calmet:1982:CAE

[Cal82] Jacques Calmet, editor. *Computer algebra: EUROCAM'82, European Computer Algebra Conference, Marseille, France, 5–7 April, 1982*, volume 144 of *Lecture Notes in Computer Science*. Springer-Verlag,

Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1982. CODEN LNCSD9. ISBN 0-387-11607-9 (USA). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA267.A1 L43 no.144.

Carrette:1984:RUM

[Car84] George J. Carrette. Results in unexpected MACSYMA implementation environments. In Golden and Hussain [GH84], pages 292–??

Caviness:1985:PEE

[Cav85] Bob F. Caviness, editor. *Proceedings: EUROCAL '85, European Conference on Computer Algebra, Linz, Austria, April 1–3, 1985. Volume 2. Research Contributions*, volume 204 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1985. CODEN LNCSD9. ISBN 0-387-15984-3. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA155.7.E4 E85 1985. URL `http://link.springer-ny.com/link/service/series/0558/tocs/t0204.htm`; `http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=204`.

Connor:1984:UAS

[CCF84] J. N. L. Connor, P. R. Curtis, and D. Farrelly. The uniform asymptotic swallowtail approximation: Practical methods for oscillating integrals with four coalescing saddle points. *J. Phys. A*, 17:283–310, 1984. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic).

Claude:1982:AMN

[CD82] Daniel Claude and Pierre Dufresne. Application of Macsyma to nonlinear systems decoupling. *Lecture Notes in Computer Science*, 144:294–301, 1982. CODEN LNCSD9. ISBN 3-540-11607-9. ISSN 0302-9743 (print), 1611-3349 (electronic).

Cohn:1987:ASM

[CD87] Harvey Cohn and Jesse Ira Deutsch. Application of symbolic manipulation to the Hecke transformations of modular forms in two variables, II. *Journal of Symbolic Computation*, 4(1):35–40, August 1987. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Cabral:2002:CCM

[CD02] Hildeberto Cabral and Florin Diacu, editors. *Classical and celestial mechanics: the Recife lectures*. Princeton University Press, Princeton, NJ, USA, 2002. ISBN 0-691-05022-8. xviii + 385 pp. LCCN QB362.M3.C52 2002. URL `http://www.loc.gov/catdir/description/prin022/2002072263.html`.

Cabannes:1990:CUM

[CDA90] Henri Cabannes and Jean-Paul Duruisseau-Alyod. Construction, using Macsyma, of exact solutions for some equations of discrete kinetic theory of gases. *American Society of Mechanical Engineers, Pressure Vessels and Piping Division (Publication) PVP*, 205:277–284, 1990. CODEN AMPPD5. ISSN 0277-027X.

Chow:1990:CNF

[CDW90] Shui-Nee Chow, Byron Drachman, and Duo Wang. Computation of normal forms. *Journal of Computational and Applied Mathematics*, 29(2):129–143, February 1990. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic).

Celis:1984:RCE

[Cel84] Pedro Celis. Remark: Corrections and errors in John Ivie's some MACSYMA programs for solving recurrence relations. *ACM Transactions on Mathematical Software*, 10 (4):477–478, December 1984. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). See [Ivi78].

Campbell:1980:SCL

[CF80] J. A. Campbell and J. P. Fitch. Symbolic computing with and without LISP. In Anonymous [Ano80], pages 1–5. LCCN QA76.73.L23 L56 1985.

Char:1984:DPM

[CFG+84] B. Char, G. Fee, K. O. Geddes, G. H. Gonnet, M. B. Monagen, and S. M. Watt. On the design and performance of the Maple system. In Golden and Hussain [GH84], pages 199–??

Chen:1990:IAM

[CG90] G. Chen and I. Gil. Implementation of an algorithm in Macsyma. computing the formal solutions of differential systems in the neighborhood of regular singular point. In Watanabe and Nagata [WN90], pages 307–?? ISBN 0-89791-401-5 (ACM), 0-201-54892-5 (Addison-Wesley). LCCN QA76.95 .I57 1990.

Char:1986:PSS

[Cha86] Bruce W. Char, editor. *Proceedings of the 1986 Symposium on Symbolic and Algebraic Computation: Symsac '86, July 21–23, 1986, Waterloo, Ontario*. ACM Press, New York, NY, USA, 1986. ISBN 0-89791-199-7. LCCN QA155.7.E4 A281 1986.

Chaloner:1988:IUM

[Cha88] Kathryn Chaloner. An illustration of using MACSYMA for optimal experimental design. In Wegman et al. [WGM88], pages 292–297. URL `http://www.dtic.mil/dtic/tr/fulltext/u2/a208838.pdf`.

Chan:1992:ASI

[Cha92] T. F. Chan. Analysis of self-excited induction generators using symbolic programming. *International Journal of Electrical Engineering Education*, 29(4):329–338, October 1992. CODEN IJEEAF. ISSN 0020-7209.

Cheng:1988:PSH

[Che88] K. J. Cheng. Perturbation solution to heat transfer in wedge-type flow using the computer algebra system MACSYMA. *American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD*, 105:47–55, 1988. CODEN ASMHD8. ISSN 0272-5673.

Chedid-Helou:1991:MMW

[CHH91] F. A. Chedid-Helou and J. H. Hemann. Mathematical modeling of wave propagation in anisotropic media. *Materials Evaluation*, 49(6):708–715, June 1991. CODEN MAEVAD. ISSN 0025-5327.

Champagne:1991:CCL

[CHW91] B. Champagne, W. Hereman, and P. Winternitz. The computer calculation of Lie point symmetries of large systems of differential equations. *Computer Physics Communications*, 66(2-3):319–340, September–October 1991. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic).

Clarkson:1989:MIL

[Cla89a] M. Clarkson. MACSYMS's inverse Laplace transform. *SIGSAM Bulletin*, 23(1):33–38, January 1989. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Clarkson:1989:ILT

[Cla89b] M. E. Clarkson. An improved Laplace transform package for MACSYMA. *SIGSAM Bulletin*, 19(2):31–33, May 1989. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Clarkson:1990:PES

[Cla90] M. E. Clarkson. Praxis: An expert system for Macsyma. In Miola [Mio90], pages 264–265. CODEN LNCSD9. ISBN 3-540-52531-9 (Berlin), 0-387-52531-9 (New York). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.S88 I576 1990.

Cooperman:1984:ATM

[Coo84] Gene Cooperman. An alternative top-level for MACSYMA. In Golden and Hussain [GH84], pages 356–??

Clarkson:1992:LTS

[CP92] Michael E. Clarkson and Huw O. Pritchard. A Laplace transform solution of Schrödinger's equation using symbolic algebra. *International Journal of Quantum Chemistry*, 41(6):829–

844, March 20, 1992. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Coppola:1991:MPI

[CR91] Vincent T. Coppola and Richard H. Rand. MACSYMA program to implement averaging using elliptic functions. In Meyer and Schmidt [MS91], page ?? ISBN 0-387-97426-1, 3-540-97426-1. LCCN QA614.58 .I52 1989; QA297 .C638 1991.

Cuevas-Rozo:2019:KIA

[CRDMBR19] Julián Cuevas-Rozo, Jose Divasón, Miguel Marco-Buzunáriz, and Ana Romero. A Kenzo interface for algebraic topology computations in SageMath. *ACM Communications in Computer Algebra*, 53(2): 61–64, June 2019. CODEN ???? ISSN 1932-2232 (print), 1932-2240 (electronic).

CrespodaSilva:1989:ANR

[Cre89] M. R. M. Crespo da Silva. Analysis of the non-planar response of a cantilever, with the aid of computerized symbolic manipulation. In Nelson, Jr. [Nel89], pages 61–70. ISBN 0-87262-698-9. LCCN TA641 .S891 1989.

CrespodaSilva:1990:FAN

[Cre90a] M. R. M. Crespo da Silva. Formulation and analysis of the nonlinear dynamics of a beam with the aid of symbolic computation. *American Society of Mechanical Engineers, Pressure Vessels and Piping Division (Publication) PVP*, 205:149–174, 1990. CODEN AMPPD5. ISSN 0277-027X.

CrespodaSilva:1990:USC

[Cre90b] M. R. M. Crespo da Silva. On the use of symbolic computation for automating the analysis of problems in dynamics. In Kinzel et al. [KRB+90], pages 593–600. ISBN 0-7918-0515-8. LCCN TA 345 A86 1990a. Two volumes.

Campbell:1979:SCC

[CS79] J. A. Campbell and P. Simon. Symbolic computing with compressable data structures. In Ng [Ng79], page ?? ISBN 0-387-09519-5. LCCN QA155.7.E4I57 1979.

Chancelier:1987:MLC

[CS87] Jean-Philippe Chancelier and Agnes Sulem. MacroTEX: a LATEX code generator in Macsyma. Rapports techniques 93, INRIA (Institut National de Recherche en Informatique et en Automatique), Le Chesnay, France, 1987. 23 + iii pp.

Chancelier:1989:MGC

[CS89] J. Ph. Chancelier and A. Sulem. MACROTEX : un générateur de code LATEX implémenté en MACSYMA. (French) [MACROTEX: a code generator implemented in MACSYMA]. *Cahiers GUTenberg*,

3:32–39, octobre 1989. ISSN 1140-9304.

Chien:1990:PCU

[CS90] L. S. Chien and C. T. Sun. Parallel computation using boundary elements in solid mechanics. *Collection of Technical Papers — AIAA/ASME/ASCE/AHS Structures, Structural Dynamics & Materials Conference*, Pt 2:644–651, 1990. CODEN CPSCDO. ISSN 0273-4508.

Chang:1990:ASM

[CTZY90] T. Y. Chang, H. Q. Tan, D. Zheng, and M. W. Yuan. Application of symbolic method to hybrid/mixed finite elements and computer implementation. *Computers and Structures*, 35(4):293–299, 1990. CODEN CMSTCJ. ISSN 0045-7949 (print), 1879-2243 (electronic).

Cuthill:1984:EII

[Cut84] Elizabeth Cuthill. Evaluating infinite integrals using MACSYMA. In Golden and Hussain [GH84], pages 291–??

Crow:1994:TSR

[CVG94] John Crow, Mario Vassallo, and Gustaf Gripenberg. Three software reviews comprise this month's column. John Crow presents the second installment of his two-part comparative review of Maple and Macsyma. Mario Vassallo reports on his experiences with spreadsheets and mathematics. Gustaf Gripenberg takes a look at MAX. *Notices Amer. Math. Soc.*, 41(4):299–306, April 1994. CODEN AMNOAN. ISSN 0002-9920 (print), 1088-9477 (electronic).

DeLoatch:1985:MUA

[DCC85] Sandra J. DeLoatch, Langley Research Center, and Norfork State College. MACSYMA usage at Langley. Central Scientific Computing Complex document Z-1; NASA contractor report NASA CR 172518, Norfolk State College, Norfolk, VA, USA, 1985. ?? pp.

Deken:1983:SCS

[Dek83] Joseph Deken. Symbolic computing and statistics. In Heiner et al. [HSW83], pages 70–73. ISBN 0-387-90835-8. LCCN QA276.4 .C58 1982.

DeLoatch:1987:MUA

[DeL87] Sandra J. DeLoatch. MACSYMA usage at Langley. NASA contractor report NASA-CR 172518, NASA, Washington, DC, USA, 1987. ?? pp.

Delest:1991:EPU

[Del91] M. Delest. Enumeration of polyominoes using Macsyma. *Theoret. Comput. Sci.*, 79(1): 209–226, February 21, 1991. CODEN TCSCDI. ISSN 0304-3975 (print), 1879-2294 (electronic).

Denny:2013:SOS

[Den13] J. K. Denny. SAGE: Open source mathematics software system (`http://sagemath.org`). *College Mathematics Journal*, 44(2):149–155, March 2013. CODEN ???? ISSN 0746-8342 (print), 1931-1346 (electronic). URL `http://www.tandfonline.com/doi/abs/10.4169/college.math.j.44.2.149`.

Deutsch:1993:IAH

[Deu93] Jesse Ira Deutsch. Identities arising from Hecke transformations of modular forms over $\mathbf{Q}(\sqrt{2})$ and $\mathbf{Q}(\sqrt{3})$. *Journal of Symbolic Computation*, 15(3):315–324 (or 315–323??), March 1993. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Devlin:1994:CMa

[Dev94a] Keith Devlin. Computers and mathematics. *Notices Amer. Math. Soc.*, 41(3):195–??, March 1, 1994. CODEN AMNOAN. ISSN 0002-9920 (print), 1088-9477 (electronic).

Devlin:1994:CMb

[Dev94b] Keith Devlin. Computers and mathematics. *Notices Amer. Math. Soc.*, 41(4):299–??, April 1, 1994. CODEN AMNOAN. ISSN 0002-9920 (print), 1088-9477 (electronic).

Devlin:1994:CMc

[Dev94c] Keith Devlin. Computers and mathematics. *Notices Amer. Math. Soc.*, 41(7):772–??, September 1994. CODEN AMNOAN. ISSN 0002-9920 (print), 1088-9477 (electronic).

Dick:2020:CCM

[Dic20] Stephanie A. Dick. Coded conduct: making MACSYMA users and the automation of mathematics. *BJHS Themes*, 5::205–224, 2020. CODEN ???? ISSN 2058-850X (print), 2056-354X (electronic). URL `https://www.cambridge.org/core/journals/bjhs-themes/article/coded-conduct-making-macsyma-users-and-the-automation-of-mathematics/19936AF1E826C13BA410EFDB704026`

Dudley:1989:CAD

[DJ89] M. L. Dudley and R. W. James. Computer-aided derivation of spherical harmonic spectral equations in astro-geophysics. *Journal of Symbolic Computation*, 8(4):423–427, October 1989. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Dhingra:1988:FMS

[DM88] A. K. Dhingra and N. K. Mani. Finite and multiply separated kinematic synthesis of link and geared mechanisms. *American Society of Mechanical Engineers, Design Engineering Division (Publication) DE*, 15-1

(PT1):317–326, 1988. CODEN AMEDEH.

Dhingra:1993:FMS

[DM93] A. K. Dhingra and N. K. Mani. Finitely and multiply separated synthesis of link and geared mechanisms using symbolic computing. *Journal of Mechanical Design, Transactions Of the ASME*, 115 (3):560–567, September 1993. ISSN 0738-0666.

Draeger:2001:MPC

[Dra01] Thomas Draeger. A Macsyma program for computing analytic Clebsch–Gordan coefficients of U(3) $\supset$ SO(3). *Computer Physics Communications*, 139(3):246–262, October 1, 2001. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0010465501002053`.

Drinkard:1984:TPU

[Dri84] R. Drew Drinkard, Jr. A tutorial on particular uses of MACSYMA. In Golden and Hussain [GH84], pages 186–??

Drinkard:1981:MPC

[DS81] R. Drew Drinkard and Nancy K. Sulinski. *MACSYMA: a program for computer algebraic manipulation (Demonstrations and Analysis)*. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA, 1981. 96 pp.

Davenport:1987:CFS

[DST87] James H. Davenport, Yvon Siret, and Évelyne Tournier. *Calcul formel: systèmes et algorithmes de manipulations algébriques. (French) [Formal calculus: systems and algorithms for algebraic manipulation]*. Études et recherches en informatique. Masson, Paris, France, 1987. ISBN 2-225-80990-9. ISSN 0763-2770. 263 pp. LCCN ????

Davenport:1988:CA

[DST88] James H. Davenport, Yvon Siret, and Évelyne Tournier. *Computer Algebra: Systems and Algorithms for Algebraic Computation*. Academic Press, New York, USA, 1988. ISBN 0-12-204230-1. xix + 267 pp. LCCN QA155.7.E4 D38 1988. Translated from the French [DST87] by A. Davenport and J. H. Davenport.

Earnshaw:1988:TFC

[Ear88] Rae A. Earnshaw, editor. *Theoretical foundations of computer graphics and CAD: Proceedings of the NATO Advanced Study Institute held at Il Ciocco, Italy, July 4-17, 1987*, volume 40 of *NATO ASI series. Series F, Computer and systems sciences*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1988. ISBN 0-387-19506-8. LCCN T385 .N3741 1987.

Einwohner:1989:MPG

[EF89] T. H. Einwohner and R. J. Fateman. A MACSYMA package for the generation and manipulation of Chebyshev series. In ACM [ACM89], pages 180–185. ISBN 0-89791-325-6. LCCN Math QA155.7.E4 I68 1989.

Easwaran:1987:AMS

[EM87] C. Easwaran and S. R. Majumdar. Application of Macsyma in solving the laminar flow of micropolar fluid in a meandering channel. *Canadian Journal of Chemical Engineering*, 65 (4):529–535, August 1987. CODEN CJCEA7. ISSN 0008-4034.

Engelman:1976:AML

[Eng76] C. Engelman. Algebraic manipulation languages. In Ralston and Meek [RM76], page ?? ISBN 0-88405-321-0. LCCN QA76.15 .E48. US$60.00.

Engelman:1984:TTD

[Eng84] Paul D. Engelman. Two to three dimensional mapping. In Golden and Hussain [GH84], pages 313–??

Eldeib:1988:SCCa

[ET88a] H. K. Eldeib and S. Tsai. Symbolic computing in computer-aided control system analysis and design. In IEEE, editor, *Proceedings of the IEEE 1988 National Aerospace and Electronics Conference, NAECON 1988, 7–10 November 1988, Convention Center, Santa Clara, California*, pages 488–491. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN 0-8186-0869-2. LCCN TK7874 .I3235 1988. IEEE catalog number 88CH2657-5.

Eldeib:1988:SCCb

[ET88b] H. K. Eldeib and S. Tsai. Symbolic computing in computer-aided control system analysis and design. In IEEE, editor, *Proceedings of the IEEE 1988 National Aerospace and Electronics Conference, 1988. NAECON 1988, 23–27 May 1988, Dayton Convention Center, Dayton, OH, USA*, volume 2, pages 428–433. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN ???? LCCN TL693 .I33 1988. US$.

Eldeib:1989:ASM

[ET89] H. K. Eldeib and S. Tsai. Applications of symbolic manipulation in control system analysis and design. In IEEE, editor, *IEEE International Symposium on Intelligent Control, 1988. Proceedings, 24–26 August 1988, Arlington, Virginia*, pages 269–274. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989. ISBN 0-8186-2012-9. LCCN TJ212.2 .I2 1988.

Fateman:1977:PMU

[F+77] R. J. Fateman et al., editors. *Proceedings of the 1977 MACSYMA Users' Conference, held at Berkeley, California, July 27–29, 1977*, number CP-2012 in NASA conference publication. NASA, Washington, DC, USA, July 1977. LCCN QA76.6 .M328 1977.

Fabunmi:1992:SPO

[Fab92] James A. Fabunmi. System parameters of output feedback controlled flexible structures. *Journal of Intelligent Material Systems and Structures*, 3(2): 316–332, April 1992. CODEN JMSSER. ISSN 1045-389X.

Fabunmi:1993:FGS

[Fab93] James A. Fabunmi. Feedback gain sensitivities of closed-loop modal parameters of controlled structures. *Journal of Guidance, Control, and Dynamics*, 16(5):892–898, September–October 1993. CODEN JGCODS. ISSN 0731-5090.

Faraji:1989:HOT

[Far89] S. Faraji. Higher order theories for thick layers of transversely isotropic material with loading symmetric about the middle plane. In Topping [Top89], pages 287–292. ISBN 0-948749-10-5. LCCN TA345.I564 1989.

Fateman:1971:ULS

[Fat71] R. J. Fateman. The user-level semantic matching capabilities in MACSYMA. In Petrick [Pet71], pages 311–323. LCCN QA76.5 .S94 1971.

Fateman:1976:MAP

[Fat76] R. J. Fateman. Macsyma arbitrary precision floating point arithmetic package — philosophy and an overview of its implementation. *SIAM Review*, 18(4):802, ???? 1976. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Fateman:1981:CAN

[Fat81] Richard J. Fateman. Computer algebra and numerical integration. In Wang [Wan81], pages 228–232. ISBN 0-89791-047-8. LCCN QA155.7.E4 A28 1981. US$23.00. ACM order no. 505810.

Fateman:1982:AMR

[Fat82a] Richard J. Fateman. Addendum to the MACSYMA reference manual for the VAX. Technical report, Computer Science Division, University of California, Berkeley, 1982.

Fateman:1982:MPV

[Fat82b] Richard J. Fateman. *MACSYMA primer for VAX/UNIX*. Computing Services, University of California, Berkeley, Berkeley, CA, USA, 1982. 32 pp.

Fateman:1987:TOM

[Fat87] Richard J. Fateman. TEX output from MACSYMA-like systems. *SIGSAM Bulletin*, 21

(4):1–5, November 1987. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Fateman:1989:RM

[Fat89] Richard J. Fateman. A review of Macsyma. *IEEE Transactions on Knowledge and Data Engineering*, 1(1):133–145, March 1989. CODEN ITKEEH. ISSN 1041-4347.

Fateman:2015:PAS

[Fat15] Richard Fateman. Partitioning of algebraic subexpressions in computer algebra systems: an alternative to matching with an application to symbolic integration. *ACM Communications in Computer Algebra*, 49 (2):38–47, June 2015. CODEN ???? ISSN 1932-2232 (print), 1932-2240 (electronic).

Favaro:1979:ISE

[Fav79] John M. Favaro. An interactive symbolic executor based on MACSYMA. Master of science, plan ii., Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, Berkeley, CA, USA, 1979.

Fell:1996:MRI

[Fel96] Richard Noel Fell. Macsyma 2.1 rebounds with improved capabilities. *Computers in Physics*, 10(5):471–??, September 1996. CODEN CPHYE2. ISSN 0894-1866 (print), 1558-4208 (electronic). URL `https://aip.scitation.org/doi/10.1063/1.4822475`.

Fell:1998:MTC

[Fel98] Richard N. Fell. *Macsyma tutorial for calculus*. Jones and Bartlett, Boston, MA, USA, 1998. ISBN 0-7637-0622-1. iv + 93 pp. LCCN QA303.5.C65 F45 1998.

Foderaro:1981:CVM

[FF81] J. K. Foderaro and R. J. Fateman. Characterization of VAX Macsyma. In Wang [Wan81], pages 14–19. ISBN 0-89791-047-8. LCCN QA155.7.E4 A28 1981. US$23.00. ACM order no. 505810.

Fateman:1984:RAM

[FFF+84] R. J. Fateman, J. Foderaro, G. Foster, R. McGeer, N. Soiffer, and C. J. Williamson. Research in algebraic manipulation at the University of California, Berkeley. In Golden and Hussain [GH84], pages 188–??

Fateman:1980:AMM

[FG80] Richard J. Fateman and Mathlab Group. *Addendum to the Mathlab/MIT MACSYMA reference manual for VAX/UNIX "VAXIMA"*. Computing Services, University of California, Berkeley, Berkeley, CA, USA, 1980. 6 pp.

Han:1993:UFP

[fHR93] Shi fang Han and K. G. Roesner. Unsteady flow of polymer fluid between coaxial cylinders. *Journal of Hydrodynamics*, 5 (2):52–62, February 1993. CO-

DEN JOUHEI. ISSN 1001-6058.

Fitch:1973:PRM

[Fit73] John Fitch. Problems #3 and #4 in REDUCE and MACSYMA. *SIGSAM Bulletin*, pages 10–11, 1973. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Fournier:1995:VMS

[FKM95] Robert Fournier, Norbert Kajler, and Bernard Mourrain. Visualization of mathematical surfaces: the IZIC server approach. *Journal of Symbolic Computation*, 19(1/2/3):159–174 (or 159–173??), January, February, March 1995. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic). Design and implementation of symbolic computation systems (Gmunden, 1993).

Fliess:1993:NCS

[Fli93] M. Fliess, editor. *Nonliner control systems design 1992: selected papers from the IFAC symposium, Bordeaux, France, 24–26 June 1992*, volume 7 of *IFAC symposia series*. Pergamon Press, Oxford, UK, 1993. CODEN ISYSEK. ISBN 0-08-041901-1. ISSN 0962-9505. LCCN TJ212.2 .N66 1993.

Foderaro:1978:TME

[Fod78] John Keith Foderaro. Typesetting MACSYMA equations. Master of science, plan ii., Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, Berkeley, CA, USA, 1978. ?? pp.

Foster:1991:PM

[Fos91] Kenneth R. Foster. Prepackaged math. *IEEE Spectrum*, 28(11):44–50, November 1991. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).

Fitzgerald:1995:TEQ

[FP95] Sue Fitzgerald and Jerry Place. Teaching elementary queueing theory with a computer algebra system. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 27(1):350–354, March 1995. CODEN SIGSD3. ISBN 0-89791-693-X. ISSN 0097-8418 (print), 2331-3927 (electronic). URL `https://www.math.utah.edu/pub/mirrors/ftp.ira.uka.de/bibliography/Math/maple-extract.bib`; `https://www.math.utah.edu/pub/mirrors/ftp.ira.uka.de/bibliography/Misc/DBLP/1995.bib`.

Frakes:1984:NSA

[Fra84] Joseph P. Frakes. Numeric-analytic solutions with the aid of MACSYMA of the Von Karman equations for a circular plate under a concentrated load. Thesis (m.s.a. math.), University of Virginia, Charlottesville, VA, USA, 1984. v + 61 + 7 pp.

Freedman:1981:IPP

[Fre81] Daniel Freedman. An integrated plotting package for VAX/ Unix Macsyma. Master of science, plan ii., Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, Berkeley, CA, USA, 1981. ?? pp.

Gupta:1986:CEP

[G. 86] G. Gupta and K. S. Ahluwalia and others, editor. *Computers in engineering, 1986: proceedings of the 1986 ASME International Computers in Engineering Conference and Exhibition, July 20–24, 1986, Chicago, Illinois*. American Society of Mechanical Engineers, 345 E. 47th St., New York, NY 10017, USA, 1986. LCCN TA345.A86 1986. Three volumes.

Gates:1984:DIA

[Gat84] Barbara Louise Gates. The design and implementation of an automatic RATFOR code generator for VAXIMA. Thesis (m.s.), Kent State University, Kent, OH, USA, 1984. iv + 93 pp.

Gerbaud:1992:MAD

[GBC92] L. Gerbaud, J. Bigeon, and G. Champenois. Modular approach to describe electromechanical systems. using Macsyma to generate global approach simulation software. *PESC record*, II(??):1189–1196, 1992. CODEN PRICDT. ISSN 0275-9306.

MathlabGroup:1974:MRM

[GBoT74] Mathlab Group, Richard Bogen, and Project Mac (Massachusetts Institute of Technology). *MACSYMA reference manual*. Massachusetts Institute of Technology, Project MAC, Cambridge, MA, USA, version 6 edition, 1974. various pp.

Geddes:1992:ACA

[GCL92] Keith O. Geddes, S. R. Czapor, and G. Labahn. *Algorithms for Computer Algebra*. Kluwer Academic Publishers Group, Norwell, MA, USA, and Dordrecht, The Netherlands, 1992. ISBN 0-7923-9259-0. xviii + 585 pp. LCCN QA155.7.E4 G43 1992.

Graham:1993:AMR

[GD93] Ronald E. Graham and Valerie J. DuFore. Arrow mode reboost analysis for space station freedom. In AACC [AAC93], pages 2485–2488. ISBN 0-7803-0861-1. LCCN TJ 212.2 A44 1993. IEEE catalog number 93CH3225-0.

Goodwin:1994:ACW

[GE94] G. C. Goodwin and R. J. Evans, editors. *Automatic Control. World Congress 1993. Proceedings of the 12th Triennial World Congress of the International Federation of Automatic Control. Vol.2. Robust Control, Design and Software,*

Sydney, Australia, 18–23 July 1993. Pergamon Press, Oxford, UK, 1994. ISBN 0-08-042213-6. LCCN TJ212.2 .I58 1993.

Genesereth:1977:ACM

[Gen77] Michael R. Genesereth. An automated consultant for MACSYMA. In ????, editor, *Proceedings of the 5th International Joint Conference on Artificial Intelligence IJCAI-77, MIT, Cambridge, Mass., August, 1977*, pages 789–?? ????, ????, 1977. ISBN ???? LCCN ????

Genesereth:1979:RPA

[Gen79] M. R. Genesereth. The role of plans in automated consultation. In IJCAI79 [IJC79], pages 311–319. ISBN 0-934613-47-8, 0-86576-058-6. LCCN Q334 .I57 1979. User consultant for MACSYMA.

Gentle:1983:CSS

[Gen83] James E. Gentle, editor. *Computer science and statistics: proceedings of the Fifteenth Symposium on the Interface, Houston, Texas, March 1983*. North-Holland, Amsterdam, The Netherlands, 1983. ISBN 0-444-86688-4. LCCN QA276.4 .S95 1983.

MathlabGroup:1980:IMV

[GF80] Mathlab Group and Richard J. Fateman. *An introduction to MACSYMA for VAX/UNIX*. Computing Services, University of California, Berkeley, Berkeley, CA, USA, 1980. 13 pp.

Gerbaud:1993:UMS

[GFB+93] L. Gerbaud, F. Pazos Flores, A. Bolopion, Y. Baudon, and J.-P. Ferrieux. On the use of MACSYMA symbolic language to generate simulation softwares for the control of converter-machine drives. In IEE [IEE93], pages 396–401. CODEN IECPB4. ISBN 0-85296-587-7. ISSN 0537-9989. LCCN TK7881.15 .I582 1993.

Golden:1984:PMU

[GH84] V. Ellen Golden and M. A. Hussain, editors. *Proceedings of the 1984 MACSYMA Users' Conference: Schenectady, New York, July 23–25, 1984*. General Electric, Schenectady, NY, USA, 1984.

Golev:2010:AAS

[GHR10] A. Golev, S. Hristova, and A. Rahnev. An algorithm for approximate solving of differential equations with "Maxima". *Computers and Mathematics with Applications*, 60(10):2771–2778, November 2010. CODEN CMAPDK. ISSN 0898-1221 (print), 1873-7668 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0898122110007169`.

Gilsinn:1995:CGA

[Gil95] David E. Gilsinn. Constructing Galerkin's approximations

of invariant tori using MACSYMA. *Nonlinear Dynamics*, 8(2):269–305, September 1995. CODEN NODYES. ISSN 0924-090X.

Grant:1988:CRB

[GJK88] P. W. Grant, C. P. Jobling, and Y. W. Ko. A comparison of rule-based and algebraic approaches to the computer-aided manipulation of linear dynamic system models. In *International Conference on Control 88, 13–15 April 1988*, number 285 in IEE conference publication, pages 87–92. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN 0-85296-360-2. ISSN 0537-9989. LCCN TJ212.2 .I546 1988.

Grabmeier:2003:CAH

[GKW03] Johannes Grabmeier, Erich Kaltofen, and Volker Weispfenning, editors. *Computer Algebra Handbook: Foundations, Applications, Systems*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2003. ISBN 3-540-65466-6. xx + 637 pp. LCCN QA155.7.E4 C64954 2003. URL `http://www.springer.com/sgw/cda/frontpage/0,11855,1-102-22-1477871-0,00.html`. Includes CD-ROM.

Golden:1982:IMD

[GM82] V. Ellen Golden and Mathlab Group. *Introductory MACSYMA documentation: a collection of papers: (a) An introduction to ITS for the Macsyma user, (b) ITS easy once ITS explained, and (c) Macsyma primer*. Massachusetts Institute of Technology, Laboratory for Computer Science, Cambridge, MA, USA, revised edition, 1982. 118 pp.

Golden:1977:MDE

[Gol77a] J. P. Golden. MACSYMA's differential equation solver. In Fateman et al. [F+77], pages xi + 501. LCCN QA76.6 .M328 1977.

Golden:1977:IMU

[Gol77b] V. Ellen Golden. An introduction to ITS for the MACSYMA user. Mathlab memo 3, Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, 1977. iii + 61 pp.

Golden:1979:IMU

[Gol79] V. Ellen Golden. An introduction to ITS for the MACSYMA user. Mathlab memo 3, Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, 1979. iii + 60 pp.

Golden:1982:IMU

[Gol82] V. Ellen Golden. *An Introduction to ITS for the MACSYMA user*. Massachusetts Institute of Technology, Laboratory for Computer Science, Cambridge, MA, USA, 1982. 118 pp.

Golden:1984:CGH

[Gol84] V. Ellen Golden. Computational geography — the habitats of the migratory Macsyma. In Golden and Hussain [GH84], pages 362–??

Golden:1985:DUF

[Gol85] Jeffery P. Golden. Differentiation of unknown functions in MACSYMA. *SIGSAM Bulletin*, 19(2):19–24, May 1985. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Golden:1986:OAM

[Gol86] J. P. Golden. An operator algebra for Macsyma. In Char [Cha86], pages 244–246. ISBN 0-89791-199-7. LCCN QA155.7.E4 A281 1986.

Gong:1983:LMH

[Gon83] Gail Gong. Letting Macsyma help. In Gentle [Gen83], pages 237–244. ISBN 0-444-86688-4. LCCN QA276.4 .S95 1983.

Gosper:1977:IHS

[Gos77] R. W. Gosper. Indefinite hypergeometric sums in MACSYMA. In Fateman et al. [F+77], page ?? LCCN QA76.6 .M328 1977.

MathlabGroup:1983:MRM

[GoTLfCS83] Mathlab Group, Massachusetts Institute of Technology. Laboratory for Computer, and Science. *MACSYMA reference manual*. Massachusetts Institute of Technology, Cambridge, MA, USA, version ten edition, 1983. ?? pp.

Grayson:1994:PFE

[Gra94] L. P. Grayson, editor. *Proceedings. Frontiers in Education. Twenty-Fourth Annual Conference. Educating Engineers for World Competition*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994. ISBN 0-7803-2413-7. LCCN ???? IEEE catalog number 94CH35723.

Grabe:1996:APS

[Grä96] Hans-Gert Gräbe. About the polynomial system solve facility of Axiom, Macsyma, Maple, Mathematica, MuPAD, and Reduce. Technical report 96-11, Institut für Informatik, Universität Leipzig, Leipzig, Germany, 1996. 28 pp.

MathlabGroup:1978:MP

[Gro78] Mathlab Group. *MACSYMA primer*. Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, 1978. 25 pp.

Guizani:1989:RM

[Gui89] M. Guizani. A review of Macsyma. *IEEE Transactions on Knowledge and Data Engineering*, 1(1):133, March 1989. CODEN ITKEEH. ISSN 1041-4347.

Gates:1984:LRC

[GW84] B. L. Gates and Paul S. Wang. A LISP-based RATFOR code generator. In Golden and Hussain [GH84], pages 319–??

Huang:1991:MDE

[H+91] T. C. Huang et al., editors. *Machinery dynamics and element vibrations: presented at the 1991 ASME design technical conferences–13th Biennial Conference on Mechanical Vibration and Noise, September 22–25, 1991, Miami, Florida*, volume 36 of *Design engineering*. American Society of Mechanical Engineers, 345 E. 47th St., New York, NY 10017, USA, 1991. CODEN AMEDEH. ISBN 0-7918-0627-8. LCCN TA355 .C66 1991b.

Hamza:1989:PII

[Ham89] M. H. Hamza, editor. *Proceedings of the IASTED International Symposium. Expert Systems Theory and Applications*. Acta Press, Anaheim, CA, USA, 1989. ISBN 0-88986-119-6. LCCN ????

Harten:1984:AMS

[Har84] Leo Harten. Applications of MACSYMA in solving lineaar systems of differential equations. In Golden and Hussain [GH84], pages 122–??

Hardy:2005:IFS

[Har05] G. H. (Godfrey Harold) Hardy. *The integration of functions of a single variable*. Dover, New York, NY, USA, 2005. ISBN 0-486-44607-7. ???? pp. LCCN QA311 .H2 2005. URL `http://www.loc.gov/catdir/enhancements/fy0625/2005049689-d.html`.

Harten:1985:SLD

[HC85] Leo P. Harten and George J. Carrette. *Share Library in DOE-MACSYMA*. ISA, Research Triangle Park, NC, USA, 1985. ISBN 0-87664-872-3. 99–102 pp. LCCN ????

Hoffmann:1991:CFP

[HCR91] Klaus A. Hoffmann, Ting-Lung Chiang, and Walter H. Rutledge. Computation of flowfields for projectiles in hypersonic chemically reacting flows. *Journal of Spacecraft and Rockets*, 28(1):23–30, January–February 1991. CODEN JSCRAG. ISSN 0022-4650.

Heiberger:1987:CSS

[Hei87] R. M. Heiberger, editor. *Computer Science and Statistics: Proceedings of the 19th Symposium on the Interface*. American Stat. Assoc, Alexandria, VA, USA, 1987.

Heller:1991:MS

[Hel91] Barbara Heller. *MACSYMA for statisticians*. Wiley series in probability and mathematical statistics. Applied probability and statistics. John Wiley and Sons, New York, NY, USA; London, UK; Sydney,

Australia, 1991. ISBN 0-471-62590-6. xiv + 246 pp. LCCN QA276.4 .H45 1991.

Hermann:1983:GCP

[Her83] R. Hermann. Geometric construction and properties of some families of solutions of nonlinear partial differential equations. *J. Math. Phys.*, 24 (3):510–521, 1983. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Herbert:1988:SCS

[Her88] T. Herbert. Symbolic computations with spectral methods. *American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD*, 105:25–31, 1988. CODEN ASMHD8. ISSN 0272-5673.

Hereman:1991:ESW

[Her91] Willy Hereman. Exact solitary wave solutions of coupled nonlinear evolution equations using MACSYMA. *Computer Physics Communications*, 65 (1-3):143–150, April 1991. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic).

Hata:1994:TAS

[HFO94] Toshiaki Hata, Masashi Furumaki, and Kazuhumi Ohenoki. Transient analysis of stress wave penetration in a plate subjected to a stress pulse (application of symbolic manipulation system to ray theory). *Nippon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A*, 60(576): 1800–1806, August 1994. CODEN NKGADA. ISSN 0387-5008.

Hansen:1989:APG

[HJL89] P. Hansen, B. Jaumard, and S. H. Lu. Automated procedure for globally optimal design. *Journal of Mechanisms, Transmissions, and Automation in Design*, 111(3):361–367, September 1989. CODEN JMTDDK. ISSN 0738-0666.

Hansen:1991:AAG

[HJL91] Pierre Hansen, Brigitte Jaumard, and Shi-Hui Lu. Analytical approach to global optimization. *Mathematical Programming*, 52(2):227–254, August 1991. CODEN MHPGA4. ISSN 0025-5610.

Ho:1994:RAS

[HLTH94] D. W. C. Ho, J. Lam, S. K. Tin, and C. Y. Han. Recent applications of symbolic computation in control system design. In Goodwin and Evans [GE94], pages 567–570. ISBN 0-08-042213-6. LCCN TJ212.2 .I58 1993.

Hussain:1983:AMC

[HN83] M. A. Hussain and Ben Noble. Applications of MACSYMA to calculations in applied mathematics. Corporate Research and Development

Report 83CRD054 (Technical information series), General Electric, Schenectady, NY, USA, 1983. 32 pp.

Hussain:1985:EFE

[HN85] M. A. Hussain and B. Noble. Equivalent formulation of equations of motion for complex dynamical systems using computer algebra. *Computers in Engineering, Proceedings of the International Computers in Engineering Conference and*, 1:483–489, 1985. CODEN COENEF.

Hereman:1987:MCV

[HNS87] W. Hereman, Y. Nagel, and J. Strikwerda. MACSYMA at CMS. Version 309.3. Report AD-A193 476; CMS-TSR-88-3, University of Wisconsin at Madison. Center for Mathematical Sciences, Madison, WI, USA, 1987. 22 pp.

Holmberg:1986:SMF

[Hol86] Ulf Holmberg. Some MACSYMA functions for analysis of multivariable linear systems. Technical Report LUFTD2/(TFRT-7333)/1040/(1986), Department of Automatic Control, Lund Institute of Technology, Lund, Sweden, 1986.

Holmes:1988:ASM

[Hol88] M. H. Holmes. Application of symbolic manipulation in the study of soft tissues. *American Society of Mechanical Engineers, Bioengineering Division (Publication) BED*, 9:111–122, 1988. CODEN ASMBEP.

Heiner:1983:CSS

[HSW83] Karl W. Heiner, Richard S. Sacher, and John W. Wilkinson, editors. *Computer Science and Statistics: proceedings of the 14th Symposium on the Interface*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1983. ISBN 0-387-90835-8. xi + 313 pp. LCCN QA276.4 .C58 1982.

Helton:1994:CSE

[HSW94] J. W. Helton, M. Stankus, and J. Wavrik. Computer simplification of engineering systems formulas. In IEEE, editor, *Proceedings of the 33rd IEEE Conference on Decision and Control, 14–16 December 1994*, volume 2, pages 1893–1898. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994. ISBN 0-7803-1968-0. LCCN TJ217 .I11c 1994. IEEE catalog number 94CH3460-3.

Helton:1998:CSF

[HSW98] J. W. Helton, M. Stankus, and J. J. Wavrik. Computer simplification of formulas in linear systems theory. *IEEE Transactions on Automatic Control*, 43(3):302–314, March 1998. CODEN IETAA9. ISSN 0018-9286.

Hollis:1984:HBM

[HT84] P. Hollis and D. L. Taylor. Hopf bifurcation in multi-degree-of-freedom systems using MACSYMA. In Golden and Hussain [GH84], pages 169–??

Hereman:1990:SWS

[HT90a] W. Hereman and M. Takaoka. Solitary wave solutions of nonlinear evolution and wave equations using a direct method and MACSYMA. *J. Phys. A*, 23(21):4805–??, November 7, 1990. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic).

Hollis:1990:ACA

[HT90b] P. Hollis and D. L. Taylor. Applications of computer algebra in journal bearing analysis. In Kinzel et al. [KRB+90], pages 601–606. ISBN 0-7918-0515-8. LCCN TA 345 A86 1990a. Two volumes.

Hereman:1987:MPP

[HV87] W. Hereman and E. Van Den Bulck. MACSYMA program for the Painlevé test of nonlinear ordinary and partial differential equations. Report AD-A194 293; CMS-TSR-88-21, University of Wisconsin at Madison. Center for Mathematical Sciences, Madison, WI, USA, 1987. 16 pp.

Hulshof:1983:R

[HvH+83] B. Hulshof, A. van Hulzen, et al. REDUCE, 1983. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Harper:1991:GCA

[HWH91] David Harper, Chris Wooff, and David Hodgkinson. *A Guide to Computer Algebra Systems*. John Wiley and Sons, New York, NY, USA; London, UK; Sydney, Australia, 1991. ISBN 0-471-92910-7. xii + 148 pp. LCCN QA155.7.E4 H37 1991. US$31.85.

IEEE:1986:PII

[IEE86] IEEE, editor. *Proceedings / 1986 IEEE International Conference on Robotics and Automation, April 7–10, 1986, the San Francisco Hilton and Tower, San Francisco, California*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1986. ISBN 0-8186-0695-9. LCCN TJ210.3 .I44 1986. Three volumes. IEEE Computer Society order number 695.

IEEE:1988:PIIb

[IEE88a] IEEE, editor. *Proceedings / 1988 IEEE International Conference on Robotics and Automation, April 24–29, 1988, Franklin Plaza Hotel, Philadelphia, Pennsylvania*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN 0-8186-0852-8. LCCN TJ 210.3 I44 1988. Three volumes.

IEEE:1988:PFC

[IEE88b] IEEE, editor. *Proceedings / the Fourth Conference on Artificial Intelligence Applications. Sheraton Harbor Island Hotel, San Diego, California, March 14–18, 1988*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN 0-8186-0837-4. LCCN Q 334 C66 1988. IEEE catalog number 88CH2552-8.

IEEE:1988:PIIa

[IEE88c] IEEE, editor. *Proceedings of the 1988 IEEE International Conference on Systems, Man and Cybernetics, August 8–12, 1988, Beijing and Shenyang, China. Beijing, China*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN 7-80003-039-3. LCCN TA 168 I19 1988. Two volumes.

IEEE:1991:IIJ

[IEE91] IEEE, editor. *1991 IEEE International Joint Conference on Neural Networks: the Westin Stamford and Westin Plaza, 18–21 November 1991, Singapore*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991. ISBN 0-7803-0227-3. LCCN QA76.87 .I4 1991. Three volumes. IEEE catalog number 91CH3065-0.

IEEE:1992:CRI

[IEE92a] IEEE, editor. *Conference record of the 1991 IEEE Particle Accelerator Conference: accelerator science and technology, May 6–9, 1991, San Francisco, California*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992. ISBN 0-7803-0135-8. LCCN QC786 .N301 1991. Five volumes. IEEE catalog no. 91CH3038-7.

IEEE:1992:PFI

[IEE92b] IEEE, editor. *Proceedings, Fourth International Conference on Software Engineering and Knowledge Engineering: SEKE 92, June 15–20, 1992, Europa Palace Hotel, Capri, Italy*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992. ISBN 0-8186-2830-8. LCCN QA76.758.I56 1992. IEEE Catalog number 92THO438-2.

IEE:1993:FEC

[IEE93] IEE, editor. *Fifth European Conference on Power Electronics and Applications: 13–16 September 1993: venue, Brighton Conference Centre, UK*, volume Eight volumes. IEE, London, UK, 1993. CODEN IECPB4. ISBN 0-85296-587-7. ISSN 0537-9989. LCCN TK7881.15 .I582 1993.

IJCAI:1979:IPS

[IJC79] *IJCAI-79: Proceedings of the Sixth International Joint Conference on Artificial Intelligence (Tokyo, August 20–23, 1979)*. Joho Shori Gakkia, Tokyo, Japan, 1979. ISBN 0-934613-47-8, 0-86576-058-6. LCCN Q334 .I57 1979. Two volumes.

Ibrahim:1988:SMI

[IL88] R. A. Ibrahim and W. Li. Structural modal interaction with combination internal resonance under wide-band random excitation. *Journal of Sound and Vibration*, 123(3): 473–495, June 1988. CODEN JSVIAG. ISSN 0022-460X.

Ionescu:1987:ESC

[ILT87] D. Ionescu, P. Lethebinh, and I. Trif. Expert system for computer process control design. In Meystel and Luh [ML87], pages 185–193. ISBN 0-8186-0761-0. LCCN TJ 212.2 I2 1987. IEEE Service Cent. Piscataway, NJ, USA.

Ivie:1977:SMP

[Ivi77] John Ivie. Some MACSYMA programs for solving recurrence relations: research project. Master of science, plan ii, Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, Berkeley, CA, USA, 1977. 24 pp.

Ivie:1978:SMP

[Ivi78] John Ivie. Some Macsyma programs for solving recurrence relations. *ACM Transactions on Mathematical Software*, 4 (1):24–33, March 1978. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). See also [Cel84].

Jenks:1974:PER

[Jen74] R. D. Jenks, editor. *Proceedings of Eurosam '74, Royal Institute of Technology, Stockholm, Sweden, August 1–2, 1974*. ACM Press, New York, NY, USA, 1974. Published in ACM SIGSAM Bulletin, volume 8, number 3.

Jenks:1984:NSL

[Jen84] Richard D. Jenks. The new SCRATCHPAD language and system for computer algebra. In Golden and Hussain [GH84], pages 409–??

Jerosolimski:1994:NMF

[JL94] M. Jerosolimski and L. Levacher. New method for fast calculation of Jacobian matrices: Automatic differentiation for power system simulation. *IEEE Transactions on Power Systems*, 9(2):700–706, May 1994. CODEN ITPSEG. ISSN 0885-8950 (print), 1558-0679 (electronic).

Ju:1985:CSF

[JM85] M. S. Ju and J. M. Mansour. Comparative studies of formu-

lating the dynamics of rigid-body systems using Macsyma — a case study. *Developments in Mechanics*, 13:185–186, 1985. CODEN DEMEAX. ISSN 0419-0262.

Ju:1987:ASS

[JM87] Ming-Shaung Ju and Joseph M. Mansour. Application of simulation sensitivity analysis to functional neuromuscular stimulation of gait. *AMD (Symposia Series) (American Society of Mechanical Engineers, Applied Mechanics Division)*, 84:327–330, 1987. CODEN AMDVAS. ISSN 0160-8835.

Ju:1988:SDL

[JM88] Ming-Shaung Ju and J. M. Mansour. Simulation of the double limb support phase of human gait. *Journal of Biomechanical Engineering, Transactions of the ASME*, 110(3): 223–229, August 1988. CODEN JBENDY. ISSN 0148-0731.

Jacky:1987:DIA

[JS87] J. Jacky and D. Schuler, editors. *Directions and Implications of Advanced Computing*. Comput. Professionals Social Responsibility, Palo Alto, CA, USA, 1987.

Keady:1991:GRM

[Kea91] G. Keady. GENTRANs from REDUCE and from MACSYMA. Technical report, University of Waikato, Mathematics Department, Waikato, New Zealand, September 1991.

Kunze:2022:HFL

[KK22] Fritz Kunze and Lauren Kunze. The history of Franz and Lisp. *IEEE Annals of the History of Computing*, 44(1): 103–108, January/March 2022. CODEN IAHCEX. ISSN 1058-6180 (print), 1934-1547 (electronic).

Kutzler:1990:SF

[KLW90] Bernhard Kutzler, Franz Lichtenberger, and Franz Winkler. *Softwaresysteme zur Formelmanipulation: praktisches Arbeiten mit den Computer-Algebra-Systemen REDUCE, MACSYMA, und DERIVE. (German) [Software systems for formula manipulation: practical work with the computer algebra systems REDUCE¡ MACSYMA, and DERIVE]*. Expert-Verlag, Ehningen bei Boeblingen, Germany, 1990. ISBN 3-8169-0445-9. 118 pp.

Kauers:2019:MOP

[KM19] Manuel Kauers and Marc Mezzarobba. Multivariate Ore polynomials in SageMath. *ACM Communications in Computer Algebra*, 53(2): 57–60, June 2019. CODEN ???? ISSN 1932-2232 (print), 1932-2240 (electronic).

Koepf:1992:PSC

[Koe92] Wolfram Koepf. Power series in computer algebra. *Journal of Symbolic Computation*, 13(6):581–604 (or 581–603??), June 1992. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Koepf:1993:EAC

[Koe93] Wolfram Koepf. Examples for the algorithmic calculation of formal Puisieux, Laurent and power series. *SIGSAM Bulletin*, 27(1):20–32, January 1993. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Kulp:1977:RTT

[KoTRLoE77] John Laurence Kulp, Massachusetts Institute of Technology. Research Laboratory of, and Electronics. Ray trajectories in a torus — an application of MACSYMA to complex numerical computation. Plasma research report PRR 77/9, Massachusetts Institute of Technology, Research Laboratory of Electronics, Cambridge, MA, USA, 1977. 7 + [2] pp.

Kowalik:1986:KBP

[Kow86] Janusz S. Kowalik. *Knowledge based problem solving*. Prentice-Hall, Englewood Cliffs, NJ 07632, USA, 1986. ISBN 0-13-516576-8. xxv + 336 pp. LCCN QA76.76.E95 K561 1986.

Kinzel:1990:CEP

[KRB+90] G. L. Kinzel, S. M. Rohde, D. W. Bennett, et al., editors. *Computers in engineering, 1990: proceedings of the 1990 ASME International Computers in Engineering Conference and Exposition, August 5–9, Boston, Massachusetts*. American Society of Mechanical Engineers, 345 E. 47th St., New York, NY 10017, USA, 1990. ISBN 0-7918-0515-8. LCCN TA 345 A86 1990a. Two volumes.

Kaw:1992:CIM

[KSB92] A. K. Kaw, A. S. Sclvarathinaru, and G. H. Besterfield. Comparison of interphase models for a crack in fiber reinforced composite. *Theoretical and Applied Fracture Mechanics*, 17(2):133–147, July 1992. CODEN TAFME4. ISSN 0167-8442.

Kutzler:1988:MFM

[Kut88] B. Kutzler. muMATH-algebra facilities on microcomputers. *Mini Micro Magazine*, 4(9):40–43, September 1988. CODEN MMMAEA. ISSN 0179-0382.

Kwok:1991:AMS

[Kwo91] Yue-Kuen Kwok. Application of MACSYMA to solutions of ordinary differential equations. *International journal of mathematical education in science and technology*, 22(6): 877–??, November 1991. CODEN IJMEBM. ISSN 0020-

739X (print), 1464-5211 (electronic).

Kutzler:1992:MEP

[KWW92] B. (Bernhard) Kutzler, Bernhard Wall, and Franz Winkler. *Mathematische Expertensysteme: Praktisches Arbeiten mit den Computer Algebra-System MACSYMA, Mathematica und DERIVE. (German) [Mathematical Expert Systems: Practical Work with the Computer Algebra Systems MACSYMA, Mathematica, and DERIVE]*. Number 430 in Kontakt und Studium. Expert-Verlag, Ehningen bei Boeblingen, Germany, 1992. ISBN 3-8169-0908-6. 119 pp. LCCN ????

Lanam:1980:PGE

[Lan80] Douglas H. Lanam. A package for generating and executing Fortran programs with Macsyma. Master of science, plan ii., Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, Berkeley, CA, USA, 1980. various pp.

Landau:1987:RUE

[Lan87] S. Landau. The responsible use of 'expert' systems. In Jacky and Schuler [JS87], pages 167–181.

Lance:1988:SCI

[Lan88] R. H. Lance. Symbolic computation and the instruction of engineering undergraduates. *American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD*, 105:21–24, 1988. CODEN ASMHD8. ISSN 0272-5673.

Lance:1989:CAU

[Lan89] Richard H. Lance. Computer algebra and undergraduate engineering teaching. *Frontiers in Education Conference*, pages 180–186, 1989. CODEN PFECDR. ISSN 0190-5848. IEEE catalog number 89CH2737-5.

Lewis:1975:IMU

[Lew75] Ellen Lewis. *An introduction to ITS for the MACSYMA user*. Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, 1975. ii + 38 pp.

Lewis:1976:IIM

[Lew76a] E. Lewis. An introduction to ITS for the MACSYMA user. Mathlab Memo 3, Massachusetts Institute of Technology, A. I. Lab., Cambridge, MA, USA, April 1976.

Lewis:1976:IMU

[Lew76b] Ellen Lewis. An introduction to ITS for the MACSYMA user. Mathlab memo 3, Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, 1976. 49 pp.

Lewis:1978:IMU

[Lew78] Ellen Lewis. *An introduction to ITS for the MAC-*

SYMA user. Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, revised edition, 1978. 64 pp.

Lewis:1979:PMU

[Lew79] V. Ellen Lewis, editor. *Proceedings of the 1979 MACSYMA Users Conference: [held in] Washington, DC, USA, June 20–22, 1979*. Massachusetts Institute of Technology, Laboratory for Computer Science, Cambridge, MA, USA, 1979.

Ladin:1987:PKD

[LF87] Zvi Ladin and Woodie Flowers. Propagation of kinematic disturbances in gait models. *IEEE/Engineering in Medicine and Biology Society Annual Conference*, pages 469–470, 1987. CODEN IMBPDN. IEEE Service Cent. Piscataway, NJ, USA.

LeGland:1986:SNE

[LG86] Francois LeGland and Antoine Gondel. Systematic numerical experiments in nonlinear filtering with automatic Fortran code generation. *Proceedings of the IEEE Conference on Decision and Control Including The Symposium on Adaptive Pro*, pages 638–642, 1986. CODEN PCDCDZ. ISSN 0191-2216. IEEE Service Cent. Piscataway, NJ, USA.

Leu:1984:ASD

[LH84] M. C. Leu and N. Hemati. Automated symbolic derivation of dynamic equations of motion for robotic manipulators. In Stelson and Sweet [SS84], pages 193–206. ISBN ???? LCCN TS191.8 .A471 1984.

Leu:1986:ASD

[LH86] M. C. Leu and N. Hemati. Automated symbolic derivation of dynamic equations of motion for robotic manipulators. *Journal of Dynamic Systems, Measurement, and Control*, 108(3): 172–179, September 1986. CODEN JDSMAA. ISSN 0022-0434.

Liang:1992:TSC

[LHC92] Robert Y. Liang, Jialou Hu, and Fred Choy. Theoretical study of crack-induced eigenfrequency changes on beam structures. *Journal of Engineering Mechanics*, 118(2): 384–394, February 1992. CODEN JENMDT. ISSN 0733-9399.

Littleboy:1976:IPM

[Lit76] David Joseph Littleboy. An interactive primer for MACSYMA. Thesis (b.s.), Massachusetts Institute of Technology, Dept. of Electrical Engineering, 1976. 39 pp.

Litwin:1990:IMA

[LMR90] Witold Litwin, Leo Mark, and Nick Roussopoulos. Interoperability of multiple autonomous

databases. *ACM Computing Surveys*, 22(3):267–293, September 1990. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). Also published in/as: University of Maryland, Systems Research Center, TR-89-12 and CS TR-2188, March 1989.

Lo:1985:AMS

[Lo85] Lilian L. Lo. Asymptotic matching by the symbolic manipulator MACSYMA. *Journal of Computational Physics*, 61(1):38–50, October 1985. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0021999185900592`.

Li:2008:MOS

[LR08] Jinhu Li and Jeffrey S. Racine. Maxima: An open source computer algebra system. *Journal of Applied Econometrics*, 23(4):515–523, June 2008. CODEN JAECET. ISSN 0883-7252 (print), 1099-1255 (electronic).

Lu:1996:SCD

[LS96] X. Y. Lu and S. K. Spurgeon. Symbolic computation for dynamic sliding mode controller design. In IEE, editor, *IEE Colloquium on Symbolic Computation for Control (Digest No: 1996/078), 2 April 1996*, pages 4/1–4/5. IEE, London, UK, 1996. ISBN ???? LCCN ????

Lueken:1977:UIF

[Lue77] E. Lueken. Überlegungen zur Implementierung eines Formelmanipulationssystemes. (German) [Considerations for the implementation of formula manipulation systems]. Master's thesis, Technische Universität Braunschweig (??), Braunschweig, Germany, 1977.

Lund:1986:UME

[Lun86] Michael Lund. Using MACSYMA to evaluate likelihood functions. Technical report 7317, Institutionen för reglerteknik, Lunds tekniska högskola, Lund, Sweden, 1986. 4 + 3 pp.

Macala:1983:SCP

[Mac83] Glenn A. Macala. Symbod: a computer program for the automatic generation of symbolic equations of motion for systems of hinge-connected rigid bodies. *AIAA Paper*, 1983. CODEN AAPRAQ. ISSN 0146-3705.

Harten:1984:MAN

[MAC84] L. P. Harten, editor. *MACSYMA Applications Newsletter*, 1(1), July 1984. Paradigm Associates, Inc., 29 Putman Ave, Suite 6, Cambridge, MA 02139, USA.

Macsyma:1988:MMR

[Mac88] Macsyma, Inc. *Macsyma mathematics reference manual*. Macsyma, Inc., Arlington,

MA, USA, version 13 edition, 1988. ???? pp.

Macsyma:1993:MMR

[Mac93a] Macsyma, Inc. *Macsyma mathematics reference manual*. Macsyma, Inc., Arlington, MA, USA, version 14 edition, 1993. 323 pp.

Macsyma:1993:MSR

[Mac93b] Macsyma, Inc. *Macsyma system reference manual*. Macsyma, Inc., Arlington, MA, USA, version 14 edition, 1993. viii + 198 pp.

Macsyma:1994:M

[Mac94] Macsyma, Inc. Macsyma, 1994. 8 computer disks.

Macsyma:1995:MGU

[Mac95a] Macsyma, Inc. *Macsyma graphics and user interface reference manual*. Macsyma, Inc., Arlington, MA, USA, fifteenth edition, 1995. vi + 119 pp.

Macsyma:1995:MMS

[Mac95b] Macsyma, Inc. *Macsyma mathematics and system reference manual*. Macsyma, Inc., Arlington, MA, USA, fifteenth edition, 1995. xviii + 498 pp.

Macsyma:1995:MUG

[Mac95c] Macsyma, Inc. *Macsyma user's guide*. Macsyma, Inc., Arlington, MA, USA, second edition, 1995. x + 294 pp.

Macsyma:1997:IM

[Mac97a] Macsyma, Inc. *Introduction to Macsyma*. Jones and Bartlett, Boston, MA, USA, 1997. ISBN 0-7637-0505-5. vi + 74 pp. LCCN QA76.95 .I63 1997.

Macsyma:1997:MNM

[Mac97b] Macsyma, Inc. *Macsyma: with the new Math Tips natural language query, you can ask for help in your own words!; Version 2.2*. Macsyma, Inc., Arlington, MA, USA, 1997. ???? pp.

Macsyma:1998:MMW

[Mac98] Macsyma Inc. *Macsyma [Medienkombination]: for Windows 3.1, 95, & NT: with the new Math Tips natural language query, you can ask for help in your own word!: version 2.3*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1998. ISBN 1-891006-01-0, 3-540-14703-9. LCCN ???? CD-ROM.

Maeder:1987:SBP

[Mae87] R. E. Maeder. Solving boundary-value problems with perturbations. *SIGSAM Bulletin*, 21(3):16–18, August 1987. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Magnan:1989:MPM

[Mag89] J. F. Magnan. A MACSYMA program for the multiple bi-

furcation analysis of double-diffusive convection. *Journal of Symbolic Computation*, 7(2):189–198 (or 189–197??), February 1989. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Man:1993:CCF

[Man93] Yiu-Kwong Man. Computing closed form solutions of first order ODEs using the Prelle–Singer procedure. *Journal of Symbolic Computation*, 16(5):423–444 (or 423–443??), November 1993. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Martin:1967:SMLa

[Mar67a] William Arthur Martin. *Symbolic Mathematical Laboratory*. Ph.D. thesis, Department of Electrical Engineering, Massachusetts Institute of Technology, Cambridge, MA, USA, 1967. 336 pp.

Martin:1967:SMLb

[Mar67b] William Arthur Martin. Symbolic mathematical laboratory. Technical Report MAC-TR-36, Project MAC, MIT, Cambridge, MA, USA, 1967. 336 pp.

Martin:1971:CIO

[Mar71a] W. A. Martin. Computer input/output of mathematical expressions. In Petrick [Pet71], pages 78–79. LCCN QA76.5 .S94 1971.

Martin:1971:DEA

[Mar71b] W. A. Martin. Determining the equivalence of algebraic expressions by hash coding. In Petrick [Pet71], pages 305–310. LCCN QA76.5 .S94 1971.

Maartensson:1986:ATC

[Mår86] Bengt Mårtensson. Automatic TEX code generation from Macsyma and CTRL-C. Technical report 7334, Institutionen för reglerteknik, Lunds tekniska högskola, Lund, Sweden, 1986. 7 + 5 pp.

Marbeau:1987:TSK

[Mar87] Jocelyne Helene Marrannes Marbeau. Towards symbolic Kriging with the help of MACSYMA. Thesis (m.a.), University of Denver, Denver, CO, USA, 1987. 79 + [76] pp.

MathlabGroup:1971:MP

[Mat71] Mathlab Group. *The MACSYMA papers 1970*. Massachusetts Institute of Technology, Mathlab Group, Cambridge, MA, USA, 1971. 94 pp.

MathlabGroup:1974:MPI

[Mat74] Mathlab Group. *MACSYMA primer: introductory section*. Cambridge, MA, USA, 1974. 64 pp.

Group:1975:MP

[Mat75] Mathlab Group. MACSYMA primer. Report, Massachusetts

Institute of Technology, A. I. Lab., Cambridge, MA, USA, October 1975.

Group:1977:MRM

[Mat77] Mathlab Group. *MACSYMA Reference Manual, Version 9*. Massachusetts Institute of Technology, Computer Science Lab., Cambridge, MA, USA, December 1977.

MathlabGroup:1980:AMM

[Mat80] Mathlab Group. *Addendum to the Mathlab/MIT MACSYMA reference manual for VAX/ UNIX version and VAX/VMS version*. Computing Services, University of California, Berkeley, Berkeley, CA, USA, 1980. 5 + [3] pp.

Mathlab:1983:MRMa

[MAT83a] MATHLAB Group. *MACSYMA Reference Manual*. Massachusetts Institute of Technology, Computer Science Lab., Cambridge, MA, USA, tenth edition, January 1983.

Group:1983:MRM

[Mat83b] Mathlab Group. *MACSYMA Reference Manual, Version Ten*. Massachusetts Institute of Technology, Computer Science Lab., Cambridge, MA, USA, 1983.

Mathews:1989:USM

[Mat89a] J. Mathews. Using a symbol manipulation program in statics to compute centroids and moments. *CoED*, 9(1):52–55, January–March 1989. CODEN CWLJDP. ISSN 0736-8607.

Mathews:1989:UCA

[Mat89b] J. H. Mathews. Using a computer algebra system to teach second order differential equations. *CoED*, 9(4):7–10, October–December 1989. CODEN CWLJDP. ISSN 0736-8607.

MathlabGroup:1975:MRM

[MB75] Mathlab Group and Richard A. Bogen. *MACSYMA reference manual*. Massachusetts Institute of Technology, Project MAC, Cambridge, MA, USA, version eight edition, 1975. iii + 199 + ix pp.

Macfarlane:1988:ASD

[MD88] Jane Macfarlane and Max Donath. Automated symbolic derivation of state equations for dynamic systems. In IEEE [IEE88b], pages 215–222. ISBN 0-8186-0837-4. LCCN Q 334 C66 1988. IEEE catalog number 88CH2552-8.

Mehta:1986:KBS

[Meh86] Unmeel Mehta. Knowledge based systems for computational aerodynamics and fluid dynamics. In *Knowledge based problem solving* [Kow86], pages 183–212. ISBN 0-13-516576-8. LCCN QA76.76.E95 K561 1986.

Mejia:1984:SAS

[Mej84] Raymond Mejia. Some applications of symbolic manipula-

tion in biomathematics. In Golden and Hussain [GH84], pages 35–??

Martin:1971:MS

[MF71] W. A. Martin and R. J. Fateman. The MACSYMA system. In Petrick [Pet71], pages 59–75. LCCN QA76.5 .S94 1971. URL `http://www.cs.utah.edu/~wilson/compilers/old/papers/p59-martin.pdf`.

Moller-Holst:1983:ITM

[MH83] Johan Møller-Holst. *Introduksjon til MACSYMA*. Kjeller: Forsvarets forskningsinstitut, ???, Norway, 1983. 117 pp.

Mignotte:1987:IAF

[Mig87] Maurice Mignotte. Inequalities about factors of integer polynomials. *SIGSAM Bulletin*, 21 (4):24, November 1987. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Mills:1993:SPS

[Mil93] H. S. D. Mills. Symbolically precise solutions to a homogeneous second order matrix ordinary differential equation with Macsyma. *Journal of Symbolic Computation*, 15(1): 91–98, January 1993. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Miola:1990:DIS

[Mio90] A. Miola, editor. *Design and implementation of symbolic computation systems: International Symposium DISCO '90, Capri, Italy, April 10–12, 1990: proceedings*, volume 429 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1990. CODEN LNCSD9. ISBN 3-540-52531-9 (Berlin), 0-387-52531-9 (New York). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.S88 I576 1990.

Meystel:1987:PII

[ML87] A. Meystel and J. Y. S. Luh, editors. *Proceedings / IEEE International Symposium on Intelligent Control 1987, 19–20 January 1987, Philadelphia, Pennsylvania*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1987. ISBN 0-8186-0761-0. LCCN TJ 212.2 I2 1987.

Martin:1970:MM

[MM70] W. A. Martin and J. Moses. Mathlab (MACSYMA). MAC Programming Report V, Massachusetts Institute of Technology, A. I. Lab., Cambridge, MA, USA, July 1969 to December 1970 1970.

Monagan:1992:HIT

[Mon92] Michael B. Monagan. A heuristic irreducibility test for univariate polynomials. *Journal of Symbolic Computation*, 13 (1):47–58 (or 47–57??), January 1992. CODEN JSYCEH.

ISSN 0747-7171 (print), 1095-855X (electronic).

Moses:1966:SSP

[Mos66a] Joel Moses. Solutions of systems of polynomial equations by elimination. *Communications of the ACM*, 9(8):634–637, August 1966. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Moses:1966:SIIa

[Mos66b] Joel Moses. Symbolic integration. Memorandum MAC-M-310, Project MAC, MIT, Cambridge, MA, USA, 1966. 17 pp. Also AI memo 97.

Moses:1966:SII

[Mos66c] Joel Moses. Symbolic integration II. Memorandum MAC-M-372, Project MAC, MIT, Cambridge, MA, USA, 1966. 17 pp. Also AI memo 97A.

Moses:1967:SIa

[Mos67a] J. Moses. *Symbolic Integration*. Ph.D. thesis, Department of Mathematics, Massachusetts Institute of Technology, 1967. i + 267 pp.

Moses:1967:SIb

[Mos67b] J. Moses. Symbolic integration. Technical Report MAC-TR-47, Project MAC, MIT, Cambridge, MA, USA, 1967. 267 pp.

Moses:1969:ICS

[Mos69] Joel Moses. The integration of a class of special functions with the Risch algorithm. *SIGSAM Bulletin*, ??(13):14–27, December 1969. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Moses:1971:ASGa

[Mos71a] J. Moses. Algebraic simplification: a guide for the perplexed. In Petrick [Pet71], pages 282–304. LCCN QA76.5 .S94 1971.

Moses:1971:SISa

[Mos71b] J. Moses. Symbolic integration: the stormy decade. In Petrick [Pet71], pages 427–440. LCCN QA76.5 .S94 1971.

Moses:1971:ASGb

[Mos71c] Joel Moses. Algebraic simplification: a guide for the perplexed. *Communications of the ACM*, 14(8):527–537, August 1971. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Moses:1971:SISb

[Mos71d] Joel Moses. Symbolic integration: The stormy decade. *Communications of the ACM*, 14(8):548–560, August 1971. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Moses:1972:TGT

[Mos72] Joel Moses. Toward a general theory of special functions. *Communications of the ACM*, 15(7):550–554, July 1972. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (elec-

tronic). Twenty-fifth anniversary of the Association for Computing Machinery.

Moses:1974:MFY

[Mos74] Joel Moses. MACSYMA — the fifth year. In Richart D. Jenks, editor, *Proceedings of EUROSAM '74, Royal Institute of Technology, Stockholm, Sweden, August 1–2, 1974*, volume 8(3) of *SIGSAM Bulletin*, page ?? ACM Press, New York, NY, USA, 1974. LCCN QA155.7.E4 S53 v.8 no.3.

Moses:1975:MP

[Mos75] J. Moses. A MACSYMA primer. Mathlab Memo 2, Massachusetts Institute of Technology, Computer Science Lab., 1975.

Moses:2007:ML

[Mos07] Joel Moses. My life. Memoir, MIT, Cambridge, MA, USA, 2007. 368 pp. URL `http://esd.mit.edu/Faculty_Pages/moses/moses_memoirs.pdf`..

Moses:2012:MPH

[Mos12] Joel Moses. Macsyma: a personal history. *Journal of Symbolic Computation*, 47(2):123–130, February 2012. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0747717110001483`.

Month:1985:SRBa

[MR85a] L. A. Month and R. H. Rand. Stability of a rigid body with an oscillating particle: an application of Macsyma. *American Society of Mechanical Engineers (Paper)*, 1985. CODEN ASMSA4. ISSN 0402-1215.

Month:1985:SRBb

[MR85b] L. A. Month and R. H. Rand. Stability of a rigid body with an oscillating particle: an application of Macsyma. *Journal of Applied Mechanics, Transactions ASME*, 52(3):686–692, September 1985. CODEN JAMCAV. ISSN 0021-8936.

Meyer:1991:CAP

[MS91] Kenneth R. (Kenneth Ray) Meyer and Dieter S. Schmidt, editors. *Computer aided proofs in analysis*, volume 28 of *The IMA volumes in mathematics and its applications*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1991. ISBN 0-387-97426-1, 3-540-97426-1. LCCN QA614.58 .I52 1989; QA297 .C638 1991.

Manor:1990:SCS

[MSI90] Rafi Manor, Beni Shalom, and Adrian Ioinovici. Simulation of cyclically switching systems using the generalized alternor definition. *International Journal of Systems Science*, 21(7): 1281–1287, July 1990. CODEN IJSYA9. ISSN 0020-7721.

Mitic:1994:PLC

[MT94] P. Mitic and P. G. Thomas. Pitfalls and limitations of computer algebra. *Computers and Education*, 22(4): 355–361, May 1994. CODEN COMEDR. ISSN 0360-1315 (print), 1873-782X (electronic).

Murzin:1985:SPR

[Mur85] F. A. Murzin. Syntactic properties of the REFAL language. *International J. Computer Mathematics*, 17:123–139, 1985. CODEN IJCMAT. ISSN 0020-7160.

Moses:1973:EGA

[MY73] Joel Moses and David Y. Y. Yun. The EZ GCD algorithm. In Erwin E. Perlin and Thomas J. McConnell, Jr., editors, *ACM '73: Proceedings of the ACM annual conference*, pages 159–166. ACM Press, New York, NY, USA, 1973. LCCN QA76.A848.

Noor:1979:CSM

[NA79] A. K. Noor and C. M. Andersen. Computerized symbolic manipulation in structural mechanics — progress and potential. *Computers and Structures*, 10:95–118, 1979. CODEN CMSTCJ. ISSN 0045-7949 (print), 1879-2243 (electronic).

Ng:1979:GJC

[NC79] E. Ng and Bruce W. Char. Gradient and Jacobian computation for numerical applications. In Lewis [Lew79], pages 604–621.

Neirynck:1980:PFE

[Nei80] Anne D. Neirynck. Partial fraction expansion routines for Vaxima. Master of science, plan ii., Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, Berkeley, CA, USA, 1980. 39 pp.

Nelson:1989:CUS

[Nel89] James K. Nelson, Jr., editor. *Computer utilization in structural engineering: proceedings of the sessions related to computer utilization at Structures Congress '89: San Francisco Hilton, San Francisco, CA, May 1–5, 1989*. American Society of Civil Engineers, New York, NY, USA, 1989. ISBN 0-87262-698-9. LCCN TA641 .S891 1989.

Ng:1979:SAC

[Ng79] Edward W. Ng, editor. *Symbolic and algebraic computation: EUROSAM '79, an International Symposium on Symbolic and Algebraic Manipulation, Marseille, France, June 1979*, volume 72 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1979. ISBN 0-387-09519-5. LCCN QA155.7.E4I57 1979.

Nielsen:1990:UCA

[NMM90] Glen C. Nielsen, Mark O. McLinden, and Graham Morrison. Use of computer algebra to locate critical loci in fluid mixtures. *Journal of Symbolic Computation*, 10(5):499–508, November 1990. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Nayfeh:1991:NRT

[NNM91] J. F. Nayfeh, A. H. Nayfeh, and D. T. Mook. Nonlinear response of thick laminated composite plates. In Huang et al. [H+91], pages 321–?? CODEN AMEDEH. ISBN 0-7918-0627-8. LCCN TA355 .C66 1991b.

Norvig:1991:PAI

[Nor91] Peter Norvig. *Paradigms of artificial intelligence programming: case studies in Common LISP*. Morgan Kaufmann Publishers, Los Altos, CA 94022, USA, 1991. ISBN 1-55860-191-0. xxviii + 946 pp. LCCN QA76.6.N687 1992.

Nicosia:1986:DMF

[NTT86] S. Nicosia, P. Tomei, and A. Tornambe. Dynamic modelling of flexible robot manipulators. In IEEE [IEE86], pages 365–372. ISBN 0-8186-0695-9. LCCN TJ210.3 .I44 1986. IEEE Service Cent. Piscataway, NJ, USA.

Nicosia:1990:DMF

[NTT90] S. Nicosia, P. Tomei, and A. Tornambe. Discrete-time modeling of flexible robots. *Proceedings of the IEEE Conference on Decision and Control*, 2:539–544, 1990. CODEN PCDCDZ. ISSN 0191-2216. IEEE catalog number 90CH2917-3.

Norman:1983:CVR

[NW83] Arthur C. Norman and Paul S. Wang. A comparison of the Vaxima and REDUCE factorization packages. *SIGSAM Bulletin*, 17(1):28–30, February 1983. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Oberaigner:1989:USC

[OA89] E. Oberaigner and K. Aziz. Use of symbolic computation in petroleum engineering. *Society of Petroleum Engineers of AIME, (Paper) SPE*, 1989. CODEN SEAPAZ.

Oberaigner:1991:USC

[OA91] Eduard Oberaigner and Khalid Aziz. Use of symbolic computation in petroleum engineering. *Journal of Petroleum Science & Engineering*, 5(3): 237–246, April 1991. CODEN JPSEE6. ISSN 0920-4105.

Olson:1992:OAM

[Ols92] Andrew M. Olson. Object-oriented analysis model of an iconic interface to Macsyma. In IEEE [IEE92b],

pages 253–260. ISBN 0-8186-2830-8. LCCN QA76.758.I56 1992. IEEE Catalog number 92THO438-2.

Orkwis:1992:NMS

[OM92] Paul D. Orkwis and D. Scott McRae. Newton's method solver for high-speed viscous separated flowfields. *American Institute of Aeronautics and Astronautics Journal*, 30 (1):78–85, January 1992. CODEN AIAJAH. ISSN 0001-1452.

Oussous:1991:CMM

[Ous91a] N. E. Oussous. Computation, on Macsyma, of the minimal differential representation of noncommutative polynomials. *Theoret. Comput. Sci.*, 79(1): 195–207, February 21, 1991. CODEN TCSCDI. ISSN 0304-3975 (print), 1879-2294 (electronic).

Oussous:1991:MCL

[Ous91b] N. E. Oussous. Macsyma computation of local minimal realization of dynamical systems of which generating power series are finite. *Journal of Symbolic Computation*, 12(1): 115–126, July 1991. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Padget:1985:CDL

[Pad85] J. A. Padget. Current development in LISP. In Caviness [Cav85], page ?? CODEN LNCSD9. ISBN 0-387-15984-3. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA155.7.E4 E85 1985. URL `http://link.springer-ny.com/link/service/series/0558/tocs/t0204.htm; http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=204`.

Painter:1992:MES

[Pai92] J. F. Painter. The matrix editor for symbolic Jacobians in ALPAL. In Wang [Wan92], pages 312–319. ISBN 0-89791-489-9 (soft cover), 0-89791-490-2 (hard cover). LCCN QA76.95.I59 1992. ACM order number: 505920.

Paradigm:1984:MAN

[Par84] *MACSYMA applications newsletter*, 1984. ISSN 8756-3762. Paradigm Associates, Inc., 29 Putman Ave, Suite 6, Cambridge, MA 02139, USA.

Paradigm:1986:MAN

[Par86] *MACSYMA Applications Newsletter*, 1986. Paradigm Associates, Inc., 29 Putman Ave, Suite 6, Cambridge, MA 02139, USA.

Pavelle:1985:MCAb

[Pav85a] R. Pavelle. Macsyma — capabilities and applications to problems in engineering and the sciences. In Buchberger [Buc85], pages 19–32. ISBN 0-387-15983-5. LCCN QA155.7.E4 E85 1985.

Pavelle:1985:MCAa

[Pav85b] Richard Pavelle. *MACSYMA: capabilities and applications to problems in engineering and the sciences*. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA, 1985. 60 pp.

Pavelle:1985:PPC

[Pav85c] Richard Pavelle. The power of present computer algebra systems: MACSYMA on a LISP-Machine. In Caviness [Cav85], page ?? CODEN LNCSD9. ISBN 0-387-15984-3. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA155.7.E4 E85 1985. URL `http://link.springer-ny.com/link/service/series/0558/tocs/t0204.htm; http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=204`.

Pavelle:1986:CAC

[Pav86] Richard Pavelle. Computer algebra: Capabilities and applications to problems in engineering and the sciences. In Pierce and Hohne [PH86], pages 100–110. CODEN ACSMC8. ISBN 0-8412-0966-9. ISSN 0097-6156. LCCN QD39.3.E46 A781 1986.

Pepper:1991:CTN

[PEK91] D. W. Pepper, Ashley F. Emery, and Matthew B. Kelleher, editors. *Computational techniques and numerical heat transfer on PCs and workstations: presented at the Winter Annual Meeting of the American Society of Mechanical Engineers, Atlanta, Georgia, December 1–6, 1991*, volume 185 of *Heat Transfer Division*. American Society of Mechanical Engineers, 345 E. 47th St., New York, NY 10017, USA, 1991. CODEN ASADD4. ISBN 0-7918-0842-4. ISSN 0733-4230. LCCN TJ260 .C6227 1991.

Petrick:1971:PER

[Pet71] S. R. Petrick, editor. *Proceedings of the Second ACM Symposium on Symbolic and Algebraic Manipulation, Los Angeles, California, March 23–25, 1971 (SYMSAM 71)*. ACM Press, New York, NY, USA, 1971. LCCN QA76.5 .S94 1971.

Petti:1988:RSM

[Pet88] R. Petti. Role of symbolic mathematics software in mathematical modeling. *American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD*, 105:13–20, 1988. CODEN ASMHD8. ISSN 0272-5673.

Place:1995:UCA

[PF95] Jerry Place and Sue Fitzgerald. Using a computer algebra system (Maple) to teach elementary queueing theory. *Computer Applications in Engineering Education*, 3(1):65–

73, 1995. CODEN CAPEED. ISSN 1061-3773.

Pierce:1986:AIA

[PH86] Thomas H. Pierce and Bruce A. Hohne, editors. *Artificial intelligence applications in chemistry*, volume 306 of *ACS symposium series*. American Chemical Society, Washington, DC, USA, 1986. CODEN ACSMC8. ISBN 0-8412-0966-9. ISSN 0097-6156. LCCN QD39.3.E46 A781 1986.

Perlis:1964:EAM

[PI64] A. J. Perlis and Renato Iturriaga. An extension to ALGOL for manipulating formulae. *Communications of the ACM*, 7(2):127–130, February 1964. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Pitman:1979:FLT

[Pit79] K. M. Pitman. A FORTRAN $\longrightarrow$ LISP translator. In Lewis [Lew79], page ??

Phelps:1988:CON

[PK88] A. R. Phelps and A. J. Krener. Computation of observer normal form using Macsyma. In Byrnes et al. [BMS88], pages 475–482. ISBN 0-444-70496-5. LCCN Math QA402.3 .A541 1988. Selected papers from the 8th International Symposium on the Mathematics of Networks and Systems, held in Phoenix, June 15–19, 1987.

Punjabi:1987:SSP

[PL87] Alkesh Punjabi and Maria Lam. Solutions of some problems in applied mathematics using MACSYMA. NASA contractor report NASA-CR 180299, NASA, Washington, DC, USA, 1987. ?? pp.

Powell:1984:ATF

[Pow84] Carl Robert Powell. An automatic testing facility for Vaxima. Thesis (m.s.), Kent State University, Kent, OH, USA, 1984. iv + 53 pp.

ProjectMac:1974:MRM

[Pro74] Project Mac (Massachusetts Institute of Technology). Mathlab Group. *MACSYMA reference manual: version seven*. Massachusetts Institute of Technology, Cambridge, MA, USA, 1974. iii + 150 + [6] pp.

Perlis:1960:SMT

[PT60] Alan J. Perlis and Charles Thornton. Symbol manipulation by threaded lists. *Communications of the ACM*, 3(4): 195–204, April 1960. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Purtilo:1985:PES

[Pur85] James Purtilo. Polylith: An environment to support management of tool interfaces. In ACM SIGPLAN 85 [ACM85], pages 12–18. ISBN 0-89791-165-2. LCCN QA76.7 .S54 v.20:7. US$21.00. Published in

ACM SIGPLAN notices, volume 20, number 7.

Pavelle:1985:M

[PW85a] Richard Pavelle and Paul S. Wang. MACSYMA from *F* to *G*. *Journal of Symbolic Computation*, 1(1):69–100, March 1985. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Pavelle:1985:MFGa

[PW85b] Richard Pavelle and Paul S. Wang. MACSYMA from F to G. *Journal of Symbolic Computation*, 1(1):69–100, March 1985. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Pavelle:1985:MFGb

[PW85c] Richard Pavelle and Paul S. Wang. *MACSYMA from F to G*. Academic Press, New York, USA, 1985. 69–100 pp.

Rand:1987:PMB

[RA87] Richard H. Rand and Dieter Armbruster. *Perturbation methods, bifurcation theory, and computer algebra*. Number 65 in Applied mathematical sciences. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1987. ISBN 0-387-96589-0. ix + 243 pp. LCCN QA1 .A647. US$29.80.

Rajaram:1987:ESD

[Raj87] N. S. Rajaram. Expert systems development: Current problems, future needs. *InTech*, 34 (4):25–26, April 1987. CODEN INTCDD. ISSN 0192-303X.

Rempfer:1988:ALD

[RAKK88] Dietmar Rempfer, Monika Auweter-Kurtz, and Hans J. Käppeler. Aufstellung und Lösung der Dispersionsgleichung zur Untersuchung von Instabilitäten in MPD-Triebwerken mit Hilfe eines MACSYMA-FORTRANHybrid-Codes. (German) [List and solution of dispersion equations for the investigation of instabilities in MPD-engines with the help of MACSYMA-FORTRAN hybrid codes]. Report 88-S18, Institut für Raumfahrtsysteme, Universität Stuttgart, Stuttgart, Germany, 1988. ii + 100 pp.

Rand:1984:CAA

[Ran84] R. H. (Richard H.) Rand. *Computer algebra in applied mathematics: an introduction to MACSYMA*. Number 94 in Research notes in mathematics. Pitman Publishing Ltd., London, UK, 1984. ISBN 0-273-08632-4 (paperback). 181 pp. LCCN QA155.7.E4 R36 1984. US$20.00.

Rand:1987:CAA

[Ran87] R. H. Rand. Computer algebra applications using MACSYMA. In Heiberger [Hei87], pages 231–236.

Rand:1988:USC

[Ran88] R. H. Rand. Use of symbolic computation in perturbation analysis. *American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD*, 105:41–45, 1988. CODEN ASMHD8. ISSN 0272-5673.

Rand:1994:TND

[Ran94] Richard H. Rand. *Topics in nonlinear dynamics with computer algebra*, volume 1 of *Computation in education*. Gordon and Breach Science, Langhorne, UK; Newark, NJ, USA, 1994. ISBN 2-88449-113-9 (hardcopy), 2-88449-114-7 (paperback). vi + 229 pp. LCCN QC133 .R36 1994.

Rayes:1988:ECE

[Ray88] Mohamed Omar Rayes. Enhancement of the complex environment of MACSYMA. Thesis (m.a.), Dept. of Mathematical Sciences, Kent State University, Kent, OH, USA, 1988. vi + 81 pp.

Reid:1991:RSD

[RB91] G. J. Reid and A. Boulton. Reduction of systems of differential equations to standard form and their integration using directed graphs. In Watt [Wat91], pages 308–312. ISBN 0-89791-437-6. LCCN QA 76.95 I59 1991.

Redfern:1998:MOL

[RCF98] Darren Redfern, Edgar Chandler, and Richard N. Fell. *Macsyma ODE lab book*. Jones and Bartlett, Boston, MA, USA, 1998. ISBN 0-7637-0532-2. vii + 147 pp. LCCN QA371.35 .R44 1998.

Rehak:1987:RVM

[RDBE87] M. L. Rehak, F. L. Dimaggio, H. Benaroya, and I. Elishakoff. Random vibrations with Macsyma. *Computer Methods in Applied Mechanics and Engineering*, 61(1):61–70, March 1987. CODEN CMMECC. ISSN 0374-2830.

Reiman:1981:CCL

[Rei81] Allan Reiman. Computer-aided closure of the Lie algebra associated with a nonlinear partial differential equation. *Computers and Mathematics with Applications*, 7(5): 387–393, ???? 1981. CODEN CMAPDK. ISSN 0898-1221 (print), 1873-7668 (electronic).

Rishel:1986:ASS

[RH86] Raymond Rishel and Lawrence Harris. Algorithm for a solution of a stochastic adaptive linear quadratic optimal control problem. *IEEE Transactions on Automatic Control*, AC-31(12):1165–1170, December 1986. CODEN IETAA9. ISSN 0018-9286.

Richardson:1968:SUP

[Ric68] Daniel Richardson. Some undecidable problems involving elementary functions of a real variable. *Journal of Symbolic Logic*, 33(4):511–520, December 1968. CODEN JSYLA6. ISSN 0022-4812 (print), 1943-5886 (electronic). URL `http://www.jstor.org/stable/2271358`.

Risch:1969:PIF

[Ris69] Robert H. Risch. The problem of integration in finite terms. *Transactions of the American Mathematical Society*, 139: 167–189, May 1969. CODEN TAMTAM. ISSN 0002-9947 (print), 1088-6850 (electronic). URL `http://www.jstor.org/stable/1995313`.

Risch:1970:SPI

[Ris70] Robert H. Risch. The solution of the problem of integration in finite terms. *Bulletin of the American Mathematical Society*, 76(??):605–608, ???? 1970. CODEN BAMOAD. ISSN 0002-9904 (print), 1936-881X (electronic). URL `http://www.ams.org/journals/bull/1970-76-03/S0002-9904-1970-12454-5/S0002-9904-1970-12454-5.pdf`.

Ritt:1948:IFT

[Rit48] J. F. Ritt. *Integration in Finite Terms: Liouville's theory of elementary methods*. Columbia University Press, New York, NY, USA, 1948. vii + 100 pp. LCCN QA308 .R5 1948.

Rand:1987:DDE

[RK87] R. H. Rand and W. L. Keith. Determinacy of degenerate equilibria with linear part $x' = y$ and $y' = 0$ using Macsyma. *Applied Mathematics and Computation*, 21(1): 1–20, January 1987. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic).

Ralston:1976:ECSa

[RM76] Anthony Ralston and Chester L. Meek, editors. *Encyclopedia of computer science*. Petrocelli/Charter, New York, NY, USA, 1976. ISBN 0-88405-321-0. xxviii + 1523 pp. LCCN QA76.15 .E48. US$60.00.

Roesner:1995:VSP

[Roe95] K. G. Roesner. Verified solutions for parameters of an exact solution for non-Newtonian liquids using computer algebra. *Zeitschrift für Angewandte Mathematik und Mechanik*, 75(suppl. 2):S435–438, 1995. CODEN ZAMMAX. ISSN 0044-2267 (print), 1521-4001 (electronic).

Rosenfeld:1974:IPP

[Ros74] Jack L. Rosenfeld, editor. *Information processing, 1974; Proceedings of IFIP Congress 74, Stockholm, Sweden, August 5–10, 1974*. North-Holland, Amsterdam, The Nether-

lands, 1974. ISBN 0-444-10689-8. LCCN QA 76 I615.

Rosencrans:1985:CHO

[Ros85] S. I. Rosencrans. Computation of higher-order fluid symmetries using MACSYMA. *Computer Physics Communications*, 38(3):347–356, December 1985. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/001046558590102X`.

Roache:1985:NAG

[RS85] Patrick J. Roache and Stanly Steinberg. New approach to grid generation using a variational formulation. *AIAA Paper*, pages 360–370, 1985. CODEN AAPRAQ. ISSN 0146-3705.

Rowney:1989:FFM

[RS89] K. T. Rowney and R. D. Silverman. Finite field manipulations in Macsyma. *SIGSAM Bulletin*, 23(1):39–48, January 1989. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Rand:1986:OMP

[RW86] D. W. Rand and P. Winternitz. Odepainleve — a Macsyma package for Painlevé analysis of ordinary differential equations. *Computer Physics Communications*, 33(12):359–383, December 1986. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic).

Sammet:1973:RPL

[Sam73] Jean E. Sammet. Roster of programming languages for 1973. *ACM Computing Reviews*, 15(4):147–??, April 1973.

Sammet:1974:RPL

[Sam74] J. E. Sammet. Roster of programming languages for 1973. *ACM SIGPLAN Notices*, 9 (11):18–31, November 1974. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sammet:1978:RPL

[Sam78] Jean E. Sammet. Roster of programming languages for 1976–77. *ACM SIGPLAN Notices*, 13(11):56–85, November 1978. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Sasaki:1986:SAE

[Sas86] Tateaki Sasaki. Simplification of algebraic expression by multiterm rewriting rules. In Char [Cha86], pages 115–120. ISBN 0-89791-199-7. LCCN QA155.7.E4 A281 1986. URL `http://www.acm.org:80/pubs/citations/proceedings/issac/32439/p115-sasaki/`.

Schou:1989:RAM

[SB89] Wayne C. Schou and Kevin A. Broughan. The Risch algorithms of MACSYMA and SENAC. *SIGSAM Bulletin*, 23(3):19–22, July 1989. CO-

DEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Saleeb:1987:EQE

[SC87] A. F. Saleeb and T. Y. Chang. Efficient quadrilateral element for plate bending analysis. *International Journal for Numerical Methods in Engineering*, 24(6):1123–1155, June 1987. CODEN IJNMBH. ISSN 0029-5981.

Su:1990:CEF

[SC90] Zhengwei Su and Philip Coppens. Closed-form expressions for Fourier–Bessel transform of Slater-type functions. *Journal of Applied Crystallography*, 23 (1):71–73, February 1990. CODEN JACGAR. ISSN 0021-8898.

Gilbert:1988:IAS

[SCG88] R. Shtokhamer, B. F. Caviness, and R. P. Gilbert. An introduction to applied symbolic computation using MACSYMA, 1988.

Schwarz:1984:AC

[Sch84] F. Schwarz. Algebra mit dem Computer. *GMD-SPIEGEL*, 2:4–6, 1984.

Seda:1988:SAT

[SDF88] S. J. Seda, M. G. R. Degrauwe, and W. Fichtner. A symbolic analysis tool for analog circuit design automation. In *Digest of technical papers / IEEE International Conference on Computer-Aided Design, ICCAD-88, a conference for the EE CAD professional, November 7–10, 1988, Convention Center, Santa Clara, California*, pages 488–491. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN 0-8186-0869-2. LCCN TK7874 .I3235 1988. Computer Society order number 869. IEEE catalog number 88CH2657-5.

Schenck:1984:AMB

[SH84] J. F. Schenck and M. A. Hussain. Application of MACSYMA to a boundary value problem arising in nuclear magnetic resonance imaging. In Golden and Hussain [GH84], pages 38–??

Steeb:2010:QMU

[SH10] Willi-Hans Steeb and Yorick Hardy. *Quantum mechanics using computer algebra: including sample programs in C++, SymbolicC++, Maxima, Maple, and Mathematica*. World Scientific Publishing Co. Pte. Ltd., P. O. Box 128, Farrer Road, Singapore 9128, second edition, 2010. ISBN 981-4307-16-5 (hardcover). x + 234 pp. LCCN QC174.17.D37 S74 2010.

Siret:1970:CAC

[Sir70] Yvon Siret. Contribution au calcul formel sur ordinateur. (Frencg) [Contribution to formal calculus on a computer]. Thése ès Sciences appliquées,

Université de Grenoble, Grenoble, France, 1970.

Sreenath:1986:DTM

[SK86] N. Sreenath and P. S. Krishnaprasad. Dynaman: a tool for manipulator design and analysis. In IEEE [IEE86], pages 836–842. ISBN 0-8186-0695-9. LCCN TJ210.3 .I44 1986. IEEE Service Cent. Piscataway, NJ, USA.

Skinner:1993:MAE

[Ski93] L. A. Skinner. Matched asymptotic expansions of integrals. *IMA Journal of Applied Mathematics (Institute of Mathematics & Its Applications)*, 50(1):77–90, 1993. CODEN IJAMDM. ISSN 0272-4960 (print), 1464-3634 (electronic).

Slagle:1961:HPS

[Sla61] James Robert Slagle. *A heuristic program that solves symbolic integration problems in freshman calculus: symbolic automatic integrator (SAINT)*. Ph.D. dissertation, MIT, Cambridge, MA., 1961.

Sloane:1986:MFM

[Slo86] N. J. A. Sloane. My friend MACSYMA. *Notices Amer. Math. Soc.*, 33(1):40–43, January 1986. CODEN AMNOAN. ISSN 0002-9920 (print), 1088-9477 (electronic).

Symbolics:1984:MRM

[SM84] Symbolics, Inc. and Mathlab Group. *MACSYMA reference manual*. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA, version ten edition, 1984. Two volumes.

Symbolics:1985:VUM

[SM85] Symbolics, Inc. and Mathlab Group. *VAX UNIX MACSYMA reference manual*. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA, version 11 edition, 1985. vii + 479 pp. Document number SMI0501030.011, corresponding to MACSYMA release 309.1.

Snyder:2017:SCD

[Sny17] Hal Snyder. SageMathCloud for collaborative document editing and scientific computing. *TUGboat*, 38(1):44–47, 2017. CODEN ???? ISSN 0896-3207. URL `https://tug.org/TUGboat/tb38-1/tb118snyder.pdf`.

Smith:1993:CEV

[SP93] R. A. Smith and A. N. Palazotto. Comparison of eight variations of a higher-order theory for cylindrical shells. *American Institute of Aeronautics and Astronautics Journal*, 31(6):1125–1132, June 1993. CODEN AIAJAH. ISSN 0001-1452.

Spirkovska:1986:MMU

[Spi86] Lilly Spirkovska. MUFIE, Macsyma's User-Friendly Interactive Executive: research project. Master of sciences, plan ii, Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, Berkeley, CA, USA, 1986. various pp.

Steinberg:1984:UVW

[SR84] Stanley Steinberg and P. Roache. Using VAXIMA to write Fortran code. In Golden and Hussain [GH84], pages 1–??

Steinberg:1986:UMW

[SR86] Stanly Steinberg and Patrick J. Roache. Using Macsyma to write FORTRAN subroutines. *Journal of Symbolic Computation*, 2(2):213–216, June 1986. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Steinberg:1988:AGF

[SR88] S. Steinberg and P. Roache. Automatic generation of finite difference code. *American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD*, 105:81–86, 1988. CODEN ASMHD8. ISSN 0272-5673.

Steinberg:1990:UMW

[SR90] Stanly Steinberg and Patrick J. Roache. Using MACSYMA to write finite-volume based PDE solvers. *American Society of Mechanical Engineers, Pressure Vessels and Piping Division (Publication) PVP*, 205:81–96, 1990. CODEN AMPPD5. ISSN 0277-027X.

Sreenath:1992:HCE

[Sre92] N. Sreenath. Hybrid computation environment for multibody simulation. *Mathematics and Computers in Simulation*, 34(2):121–140, August 1992. CODEN MCSIDR. ISSN 0378-4754 (print), 1872-7166 (electronic).

Stock:1973:BPL

[SS73] Marylene Stock and Karl F. Stock. Bibliography of programming languages: Books, user manuals and articles from PLANKALKUL to PL/I. In ????, editor, *????*, pages 349–?? Verlag Dokumentation, Pullach/Munchen, Germany, 1973. ISBN ???? LCCN ????

Stelson:1984:SCA

[SS84] K. A. Stelson and L. M. Sweet, editors. *Sensors and controls for automated manufacturing and robotics: presented at the Winter Annual Meeting of the American Society of Mechanical Engineers, New Orleans, Louisiana, December 9–14, 1984*. American Society of Mechanical Engineers, 345 E. 47th St., New York, NY 10017, USA, 1984. ISBN ???? LCCN TS191.8 .A471 1984.

Stanat:1984:FLM

[Sta84] Donald F. Stanat. A functional language machine and its pro-

gramming. In Golden and Hussain [GH84], pages 371–??

Stoutemyer:1984:WPR

[Sto84] David R. Stoutemyer. Which polynomial representation is best? In Golden and Hussain [GH84], pages 221–??

Strubbe:1974:MSC

[Str74] H. Strubbe. Manual for SCHOONSCHIP a CDC 6000/7000 program for symbolic evaluation of algebraic expressions. *Computer Physics Communications*, 8(1):1–30, August 1974. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0010465574900812`.

Strauss:1985:JFJ

[Str85] Nicholas Strauss. Jordan form of $(i + j, j)$ over Z_p. Working Paper 275, Massachusetts Institute of Technology, Computer Science Lab., Cambridge, MA, USA, July 1985.

Strassberg:1990:TDP

[Str90] Dan Strassberg. Taking the drudgery out of problem solving: mathematical software packages. *EDN*, March 15, 1990.

Suarez:1984:CAA

[Sua84] M. L. Suarez. Computer algebra applied to Kalman filtering. In Golden and Hussain [GH84], pages 188–??

Symbolics:1984:MN

[Sym84] *MACSYMA newsletter*, 1984. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA.

Symbolics:1985:IM

[Sym85a] Symbolics, Inc. *An Introduction to MACSYMA*. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA, 1985. 18 pp.

Symbolics:1985:IUM

[Sym85b] Symbolics, Inc. *An introduction to UNIX MACSYMA*. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA, version 3.0 edition, 1985. 26 pp.

Symbolics:1986:MN

[Sym86a] Symbolics, Inc. MACSYMA Newsletter, 1986.

Symbolics:1986:IMS

[Sym86b] Symbolics, Inc., Computer Aided Mathematics Group. *An Introduction to MACSYMA for Symbolics computers*. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA, version 4.0 edition, 1986. 36 + [4] pp.

Symbolics:1987:MUG

[Sym87a] Symbolics, Inc., Burlington, MA, USA. *Macsyma User's Guide*, 1987.

Symbolics:1987:BPR

[Sym87b] Symbolics, Inc., Computer Aided Mathematics Group.

Bibliography of publications referencing MACSYMA. Symbolics, Inc., 11 Cambridge Center, Cambridge MA 02142, USA, 1987. iv + 96 pp.

Symbolics:1988:MUG

[Sym88a] Symbolics, Inc., Burlington, MA, USA. *Macsyma User's Guide*, 1988.

Symbolics:1988:MRM

[Sym88b] Symbolics, Inc., Computer Aided Mathematics Group. *MACSYMA reference manual*. Symbolics, Inc., Burlington, MA, USA, version 13 edition, 1988. various pp.

Tan:1990:OTS

[TD90] H. Q. Tan and X. Dong. Optimization techniques for symbolic equation solver in engineering applications. In Watanabe and Nagata [WN90], pages 305–?? ISBN 0-89791-401-5 (ACM), 0-201-54892-5 (Addison-Wesley). LCCN QA76.95 .I57 1990.

Tan:1988:SDC

[TDA88] H. Q. Tan, X. Dong, and S. M. Arnold. Symbolic derivation of constitutive equations. *American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD*, 105:103–109, 1988. CODEN ASMHD8. ISSN 0272-5673.

Thejll:1990:UMS

[TG90] P. Thejll and R. P. Gilbert. The use of MACSYMA for solving elliptic boundary value problems. *Zeitschrift für Angewandte Mathematik und Mechanik*, 70(11):479–??, 1990. CODEN ZAMMAX. ISSN 0044-2267 (print), 1521-4001 (electronic).

Toyama:1990:SAR

[TH90] S. Toyama and S. Hatae. SYMTOM: an algebraic robotic manipulator modelling program. In IEEE, editor, *IEEE International Workshop on Intelligent Robots and Systems '90. 'Towards a New Frontier of Applications', Proceedings. IROS '90, July 3-6, 1990, Tsuchiura-shi, Ibaraki, Japan*, volume 1, pages 197–204. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1990. ISBN ???? LCCN TJ210.3 .I34 1990.

Tomovic:1994:CAS

[TH94] M. M. Tomovic and V. S. Hillman. Computer algebra systems enhance teaching engineering technology courses. In Grayson [Gra94], pages 161–164. ISBN 0-7803-2413-7. LCCN ???? IEEE catalog number 94CH35723.

Thas:1989:CRMa

[Tha89a] C. Thas. A collection of REDUCE and MACSYMA programs about college geometry. part 1. Technical Report 5, State University of Gent, Gent, Belgium, September 1989.

Thas:1989:CRMb

[Tha89b] C. Thas. A collection of REDUCE and MACSYMA programs about college geometry. part 2. Technical Report 5, State University of Gent, Gent, Belgium, September 1989.

Mathlab:1983:MRMb

[The83a] The Mathlab Group, Lab. for Computer Science, MIT. *MACSYMA Reference Manual, Version 10, Volume I*. Symbolics, Inc., Burlington, MA, USA, second printing edition, December 1983.

Mathlab:1983:MRMc

[The83b] The Mathlab Group, Lab. for Computer Science, MIT. *MACSYMA Reference Manual, Version 10, Volume II*. Symbolics, Inc., Burlington, MA, USA, second printing edition, December 1983.

Tombal:1985:MCD

[TM85] Ph. Tombal and A. Moussiaux. MACSYMA computation of the Dirac–Bergmann algorithm for Hamiltonian systems with constraints. *Journal of Symbolic Computation*, 1(4):419–421, December 1985. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Tombal:1989:APG

[TM89] Ph. Tombal and A. Moussiaux. Algebraic programming of geometrical calculus and Clifford algebra. *Journal of Symbolic Computation*, 7(1):85–92 (or 85–91??), January 1989. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Tokhi:1999:ICS

[TMH99] M. O. Tokhi, Z. Mohamed, and A. W. I. Hashim. IEE colloquium on symbolic computation for control (ref. no. 1999/088), 17 June 1999. In IEE, editor, *Application of symbolic manipulation to the analysis of dynamic characteristics of a flexible robot manipulator*, pages 7/1–7/5. IEE, London, UK, 1999. ISBN ???? LCCN ????

Tobey:1971:SMC

[Tob71] R. G. Tobey. Symbolic mathematical computation — introduction and overview. In Petrick [Pet71], page ?? LCCN QA76.5 .S94 1971.

Topping:1989:CCP

[Top89] B. H. V. Topping, editor. *Civil-Comp 89: proceedings of the Fourth International Conference on Civil and Structural Engineering Computing: Sep 19–21 1989: London, England*. Civil-Comp Limited, Edinburgh, Scotland, 1989. ISBN 0-948749-10-5. LCCN TA345.I564 1989.

Trager:1984:IAF

[Tra84] B. M. Trager. *Integration of algebraic functions*. Ph.D. dis-

sertation, EECS Department, MIT, Cambridge, MA, 1984.

Targett:1992:SCF

[TRC92] Matthew J. Targett, William B. Retallick, and Stuart W. Churchill. Solutions in closed form for a double-spiral heat exchanger. *Industrial and engineering chemistry research*, 31 (3):658–669, March 1992. CODEN IECRED. ISSN 0888-5885.

Turetken:2000:CSC

[TS00] B. Turetken and S. Eren San. Comparison of symbolic computation techniques for problems in electromagnetics. In IEEE, editor, *International Conference on Mathematical Methods in Electromagnetic Theory, 2000. MMET 2000, 12–15 September 2000*, volume 1, pages 172–174. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000. ISBN 0-7803-6347-7. LCCN QC760 .I65 2000. IEEE catalog number 00EX413.

Tomei:1988:AMR

[TT88] Patrizio Tomei and Antonio Tornambe. Approximate modeling of robots having elastic links. *IEEE Transactions on Systems, Man, and Cybernetics*, 18(5):831–840, September–October 1988. CODEN ISYMAW. ISSN 0018-9472, 1083-4427.

TeBeest:1991:NCW

[TTDD91] Kevin G. TeBeest, Steven A. Trogdon, Jeffrey R. Dahl, and Rod W. Douglass. Natural convection within spherical annuli by symbolic algebra on workstations. In Pepper et al. [PEK91], pages 101–106. CODEN ASADD4. ISBN 0-7918-0842-4. ISSN 0733-4230. LCCN TJ260 .C6227 1991.

Tunstel:1989:MMK

[TV89] E. Tunstel and N. Vira. Mechanization of manipulator kinematic equations via MACSYMA. *Computers in Engineering, Proceedings of the International Computers in Engineering Conference and Exhibit*, pages 649–655, 1989. CODEN COENEF.

Tzes:1988:SMP

[TYL88] Anthony P. Tzes, Stephen Yurkovich, and F. Dieter Langer. Symbolic manipulation package for modeling of rigid or flexible manipulators. In IEEE [IEE88a], pages 1526–1531. ISBN 0-8186-0852-8. LCCN TJ 210.3 I44 1988. IEEE Service Cent. Piscataway, NJ, USA.

Tzes:1989:MSE

[TYL89] Anthony P. Tzes, Stephen Yurkovich, and F. Dieter Langer. Method for solution of the Euler–Bernoulli beam equation in flexible-link robotic systems. In *Proceedings of the IEEE Inter-*

national Conference on Systems Engineering August 24-26 1989 Dayton, Ohio (Aug 24–26 1989: Fairborn, OH, USA), pages 557–560. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989. IEEE catalog number 89CH2767-2.

Unal:1988:ACO

[Una88] A. Unal. An algebraic criterion for the onset of chaos in nonlinear dynamical systems. In IEEE, editor, *IEEE International Symposium on Circuits and Systems, Helsinki University of Technology, Espoo, Finland, June 7-9, 1988*, volume 1, pages 19–22. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN 951-721-239-9. LCCN TK7801 .I245 1988.

vanHulzen:1982:CAS

[van82] J. A. van Hulzen. Computer algebra systems viewed by a notorious user. *Lecture Notes in Computer Science*, 144:166–180, 1982. CODEN LNCSD9. ISBN 3-540-11607-9. ISSN 0302-9743 (print), 1611-3349 (electronic).

Vira:1990:ASC

[VGT90] N. Vira, T. Gill, and E. Tunstel. Application of symbolic computation in robot pose error modeling. *Journal of Symbolic Computation*, 10(5):509–524 (or 509–523??), November 1990. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Vira:1992:USC

[VT92] N. Vira and E. Tunstel. Use of symbolic computation in robotics education. *IEEE Transactions on Education*, 35 (1):18–30, February 1992. CODEN IEEDAB. ISSN 0018-9359.

Wang:1971:ACL

[Wan71a] P. S. Wang. Automatic computation of limits. In Petrick [Pet71], pages 458–464. LCCN QA76.5 .S94 1971.

Wang:1971:EDIa

[Wan71b] Paul S.-H. Wang. *Evaluation of definite integrals by symbolic manipulation*. Ph.D. thesis, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, MA, USA, 1971. 185 pp.

Wang:1971:EDIb

[Wan71c] Paul S.-H. Wang. Evaluation of definite integrals by symbolic manipulation. Report MAC-TR-92, Project MAC, MIT, Cambridge, MA, USA, 1971.

Wang:1974:SED

[Wan74] Paul S. Wang. Symbolic evaluation of definite integrals by residue theory in Macsyma. In Rosenfeld [Ros74], pages 823–827. ISBN 0-444-10689-8. LCCN QA 76 I615.

Wang:1979:PAC

[Wan79] P. Wang. Parallel p-adic construction in the univariate polynomial factoring algorithm. In Lewis [Lew79], pages 310–317.

Wang:1981:SPA

[Wan81] Paul S. Wang, editor. *SYMSAC '81: proceedings of the 1981 ACM Symposium on Symbolic and Algebraic Computation, Snowbird, Utah, August 5–7, 1981*. ACM Press, New York, NY, USA, 1981. ISBN 0-89791-047-8. LCCN QA155.7.E4 A28 1981. US$23.00. ACM order no. 505810.

Wang:1982:HAV

[Wan82] Paul S. Wang. Hacijan's algorithm in Vaxima: Improvements and difficulties. *Lecture Notes in Computer Science*, 144:135–143, 1982. CODEN LNCSD9. ISBN 3-540-11607-9. ISSN 0302-9743 (print), 1611-3349 (electronic).

Wang:1984:MFE

[Wan84] Paul S. Wang. MACSYMA-aided finite element analysis. In Golden and Hussain [GH84], pages 23–??

Wang:1985:CSN

[Wan85] Paul S. Wang. Combining symbolic and numerical computational techniques on modern workstations. *Proceedings of the Hawaii International Conference on System Science*, pages 248–??, 1985. CODEN PHISD7. ISSN 0073-1129.

Wang:1991:TMI

[Wan91] D. Wang. A toolkit for manipulating indefinite summations with application to neural networks. In Watt [Wat91], pages 462–463. ISBN 0-89791-437-6. LCCN QA 76.95 I59 1991.

Wang:1992:PII

[Wan92] Paul S. Wang, editor. *Proceedings of ISSAC '92. International Symposium on Symbolic and Algebraic Computation*. ACM Press, New York, NY, USA, 1992. ISBN 0-89791-489-9 (soft cover), 0-89791-490-2 (hard cover). LCCN QA76.95.I59 1992. ACM order number: 505920.

Wang:1994:DII

[Wan94] Dong Ming Wang. Differentiation and integration of indefinite summations with respect to indexed variables — some rules and applications. *Journal of Symbolic Computation*, 18(3):249–264 (or 249–263??), September 1994. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Ward:1990:SMC

[War90] Thomas L. Ward. Symbolic mathematical computation in engineering economy. *CoED (Journal) (Computers in Education Division of ASEE)*,

10(1):14–18, January–March 1990. CODEN CWLJDP. ISSN 0736-8607.

Watt:1991:PIS

[Wat91] Stephen M. Watt, editor. *Proceedings of the 1991 International Symposium on Symbolic and Algebraic Computation. ISSAC '91, July 15–17, 1991, Bonn, Germany*. ACM Press, New York, NY, USA, 1991. ISBN 0-89791-437-6. LCCN QA 76.95 I59 1991.

Wayner:1990:MMP

[Way90] Peter Wayner. Mainframe math on a PC: Macsyma, the grande dame of computer algebra, is finally available for PCs. *BYTE Magazine*, 15(1):207–208, 210, January 1990. CODEN BYTEDJ. ISSN 0360-5280 (print), 1082-7838 (electronic).

Wells:1972:RTD

[Wel72] Mark B. Wells. A review of two-dimensional programming languages. *ACM SIGPLAN Notices*, 7(10):1–10, October 1972. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Wester:1999:CAS

[Wes99] Michael J. Wester, editor. *Computer algebra systems: a practical guide*. John Wiley and Sons, New York, NY, USA; London, UK; Sydney, Australia, 1999. ISBN 0-471-98353-5. xvi + 436 pp. LCCN QA155.7.E4 W48 1999. URL `http://www.loc.gov/catdir/description/wiley033/99021149.html`; `http://www.loc.gov/catdir/toc/onix03/99021149.html`.

Wegman:1988:CSS

[WGM88] Edward J. Wegman, Donald T. Gantz, and John J. Miller, editors. *Computing Science and Statistics Proceedings of the 20th Symposium on the Interface Fairfax, Virginia, April 1988*. American Statistical Association, Alexandria, VA, USA, 1988. URL `http://www.dtic.mil/dtic/tr/fulltext/u2/a208838.pdf`.

Wilcox:1984:ASS

[WH84a] Ralph Wilcox and Leo Harten. Analytical solutions to some linear systems of differential equation. In Golden and Hussain [GH84], pages 138–??

Wilcox:1984:MGC

[WH84b] Ralph M. Wilcox and Leo P. Harten. MACSYMA-generated closed-form solutions to some matrix Riccati equations. *Applied Mathematics and Computation*, 14(2):149–166, February 1984. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0096300384900353`.

White:1977:LDI

[Whi77a] J. L. White. LISP: Data is program, a tutorial in LISP. In Fateman et al. [F+77], page ?? LCCN QA76.6 .M328 1977.

White:1977:LPI

[Whi77b] J. L. White. LISP: Program is data, a historical perspective on MACLISP. In Fateman et al. [F+77], page ?? LCCN QA76.6 .M328 1977.

Watowich:1986:SAO

[WKB86] S. J. Watowich, J. L. Krause, and R. S. Berry. Stability analysis of an optimally controlled light-driven engine. *Journal of Symbolic Computation*, 2(1): 103–108, March 1986. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Watanabe:1990:IPI

[WN90] Shunro Watanabe and Morio Nagata, editors. *ISSAC '90: proceedings of the International Symposium on Symbolic and Algebraic Computation: August 20–24, 1990, Tokyo, Japan*. ACM Press and Addison-Wesley, New York, NY, USA and Reading, MA, USA, 1990. ISBN 0-89791-401-5 (ACM), 0-201-54892-5 (Addison-Wesley). LCCN QA76.95 .I57 1990.

Wolfram:1979:MTF

[Wol79] Steve Wolfram. MACSYMA tools for Feynman diagram calculations. In Lewis [Lew79], page ??

Wolfram:1984:FYS

[Wol84] Steve Wolfram. Five years of SMP. In Golden and Hussain [GH84], pages 220–??

Wolfram:1985:SMC

[Wol85] Stephen Wolfram. Symbolic mathematical computation. *Communications of the ACM*, 28(4):390–394, 1985. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

Wood:1984:OSP

[Woo84] David L. Wood. An overdetermined system of partial differential equations. In Golden and Hussain [GH84], pages 121–??

Wang:1975:FMP

[WR75] Paul S. Wang and Linda Preiss Rothschild. Factoring multivariate polynomials over the integers. *Mathematics of Computation*, 29(131):935–950, July 1975. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic).

Wester:1983:EMC

[WS83] Michael Wester and Stanly Steinberg. An extension to MACSYMA's concept of functional differentiation. *SIGSAM Bulletin*, 17(3/4):25–30, August/November 1983. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Wester:1984:SSD

[WS84] Michael Wester and Stanly Steinberg. A survey of symbolic differentiation implementations. In Golden and Hussain [GH84], pages 330–??

Weggel:1988:NAF

[WS88] C. F. Weggel and D. P. Schwartz. New analytical formulas for calculating magnetic field. *IEEE Transactions on Magnetics*, 24(2 (part 2)): 1544–1547, March 1988. CODEN IEMGAQ. ISSN 0018-9464.

Wang:1991:CAIa

[WS91a] D. Wang and B. Schurmann. Computer aided investigations of artificial neural systems. In IEEE, editor, *International Joint Conference on Neural Networks, 1991., IJCNN-91-Seattle, 8–14 July 1991*, volume 2, page 981. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991. ISBN 0-7803-0164-1. LCCN QA76.87 .I57 1991.

Wang:1991:CAIb

[WS91b] Dongming Wang and Bernd Schurmann. Computer aided investigations of artificial neural systems. In IEEE [IEE91], pages 2325–2330. ISBN 0-7803-0227-3. LCCN QA76.87 .I4 1991. Three volumes. IEEE catalog number 91CH3065-0.

Wang:1992:CAA

[WS92] D. Wang and B. Schurmann. Computer aided analysis and derivation for artificial neural systems. *IEEE Transactions on Software Engineering*, 18 (8):728–735, August 1992. CODEN IESEDJ. ISSN 0098-5589 (print), 1939-3520 (electronic).

Yagla:1984:SCF

[Yag84] J. J. Yagla. Stability criteria for finite difference equations. In Golden and Hussain [GH84], pages 294–??

Yamartino:1991:ACA

[YP91] Robert J. Yamartino and Richard Pavelle. An application of computer algebra to a problem in stratified fluid flow. *Journal of Symbolic Computation*, 12(6):669–672, December 1991. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Syu:1988:AMF

[yS88] Chiung yu Syu. An application of MACSYMA in fluid mechanics. Thesis (m.s.m.e.), University of Massachusetts at Amherst, Amherst, MA, USA, 1988. vi + 69 pp.

Young:1985:IPP

[YW85] Douglas A. Young and Paul S. Wang. An improved plotting package for Vaxima. In Buchberger [Buc85], page 431. ISBN 0-387-15983-5. LCCN QA155.7.E4 E85 1985.

Young:1987:GGU

[YW87] D. A. Young and P. S. Wang. GI/S: a graphical user interface for symbolic computation systems. *Journal of Symbolic Computation*, 4(3):365–380, December 1987. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

Zippel:1979:PAS

[Zip79] R. E. Zippel. Probabilistic algorithms for sparse polynomials. In Edward W. Ng, editor, *EUROSAM 79, Colloque International sur les Méthodes de Calcul Symbolique et Algébrique*, volume 72 of *Lecture Notes in Computer Science*, pages 216–226. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1979.

Zewari:1986:PIR

[ZZ86] S. W. Zewari and J. M. Zugel. Prolog implementation in robot kinematics. In G. Gupta and K. S. Ahluwalia and others [G. 86], pages 133–136. LCCN TA345.A86 1986. Three volumes.