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**Title word cross-reference**

\[-1/2, 1/2, 2/3, 5/2 \] [942]. \(0 - 1 \) [498]. \(1 \) [1127]. 2 
\([1059, 1265, 1228, 1406, 1226, 1161]\). \(2^p - 1 \) [925]. \(3 \) [792, 1406, 1403, 1466]. 64 
\([1565]\). \(A - B \) [784]. \(A - \lambda B \) [785]. \(a = \pm 2^q + 2^r \) [995]. \(ab + cd \) [1438]. \(Ax = b \) [351]. \(AX^2 + BX + C = 0 \) [415]. \(AXB^T + CXD^T = E \) [1071, 753, 752]. \(\beta \) 
\([1515]\). \(C^1 \) [1114, 660, 683]. \(C^2 \) [683, 682, 286]. \(E_n(x) \) [437]. \(\ell_1 \) [283, 316, 315]. 
\(F \) [803, 802, 617, 12]. \(f(x) \) [403]. \(F_2 \) [1565]. \(H_\rho \) [453, 452]. \(hp \) [1433, 1432]. 
\(h \to \infty \) [445]. \(i \) [105]. \(I_0 \) [150]. \(I_1(x)/I_0(x) \) [336, 332]. \(I_{1.5}(x)/I_{0.5}(x) \) 
\([336, 332]\). \(J_n(x) \) [126, 125, 207]. \(i^{th} \) [30]. \(J_{\nu}(x) \) [126, 125, 207]. \(k \) [789, 1515]. 
\(k < m \) [1515]. \(K_{\nu}(x) \) [438, 437]. \(L_1 \) [282, 281, 317, 314, 908]. \(l_2 \) [1455]. \(L_\infty \) 
\([512]\). \(LDL^T \) [1535]. \(m \) [1515]. \(MDM^T \) [876]. \(N \) [1180, 105, 30, 1455, 213]. 
\(O(\log_2 k) \) [789]. \(O(n(1 + \log(N/n))) \) [841]. \(O(n^{1/2}) \) [616]. \(\omega \) [1362]. \(\pm 2^{k_1} \pm 2^{k_2} \) 
[925]. \(Q \) [1048, 1555, 1420]. \(QR \) [1545, 1499, 1460, 1505, 1552, 953, 952, 1412]. 
\(rc \) [804, 19, 79]. \(r \times c \) [542]. \(s \) [1347]. \(T \) [1543, 1036, 14, 15, 338, 339, 228]. 
\(U(a, x) \) [1165, 1164]. \(v \) [566, 619]. \(V(a, x) \) [1165, 1164]. \(\varphi \) [1285, 1364].
\[ W(a, x) \] \[ = f(x_n) \] \[ x_n+1 = f(x_n) \] \[ x \geq 0, \nu \geq 0 \] \[ [126, 125, 207]. \]


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REFERENCES


References


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[84] John R. Rice. TOMS policy statement: The rights of program authors in the evaluation of programs. *ACM Transactions on Mathematical Soft-
REFERENCES


Ford:1976:DSN


Paul:1976:SEF


Janko:1976:LIS


Atkinson:1976:APL


Shampine:1976:GEE


Ericksen:1976:ICP


Atkinson:1976:AAP

[91] Kendall Atkinson. Algorithm 503: An automatic program for Fredholm integral equations of the second kind [D5]. *ACM Transactions on Mathe-
REFERENCES


References


REFERENCES


REFERENCES


[118] Linda Kaufman. Remark on “Algorithm 496: The LZ algorithm to solve the generalized eigenvalue problem for complex matrices [F2]”. *ACM
REFERENCES


D. E. Amos, S. L. Daniel, and M. K. Weston. CDC 6600 subroutines IBESS and JBESS for Bessel functions $I_{\nu}(x)$ and $J_{\nu}(x)$, $x \geq 0, \nu \geq 0$. 
REFERENCES


[126] D. E. Amos, S. L. Daniel, and M. K. Weston. Algorithm 511: CDC 6600 subroutines IBESS and JBESS for Bessel functions $I_{\nu}(x)$ and $J_{\nu}(x)$, $x \geq 0, \nu \geq 0$ [S18]. *ACM Transactions on Mathematical Software*, 3(1):93–95, March 1977. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). See erratum [207].


S. P. Chan, R. Feldman, and B. N. Parlett. Algorithm 517: a program for computing the condition numbers of matrix eigenvalues without com-


REFERENCES


REFERENCES


REFERENCES

Boyce:1977:IPF


Cabay:1977:CTE


Eddy:1977:NCH


Cabay:1977:AEC


Eddy:1977:ACN


Dinkel:1978:SAP

REFERENCES


REFERENCES


REFERENCES


[186] S. J. Polak, J. Schrooten, and C. Barneveld Binkhuysen. TEDDY2, a program package for parabolic composite region problems. ACM Trans-
REFERENCES


REFERENCES


[207] Donald E. Amos. Erratum: “Algorithm 511: CDC 6600 subroutines IBESS and JBESS for Bessel functions $I_\nu(x)$ and $J_\nu(x)$, $x \geq 0, \nu \geq 0$ [S18]”. *ACM Transactions on Mathematical Software*, 4(4):411, December 1978. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). See [126].
REFERENCES


REFERENCES  


REFERENCES

DEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). See corrigenda [261].


REFERENCES


REFERENCES


REFERENCES


REFERENCES

December 1979. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[306] U. Harms, H. Kollakowski, and G. Möller. Remark on “Algorithm 408: a sparse matrix package (part 1) [F4]”. ACM Transactions on Mathematical...

Machura:1980:SSP


Kurator:1980:PIS


Brown:1980:EPB


Luk:1980:CSV


Sacks-Davis:1980:FLC


Bentley:1980:OET


Campbell:1980:TAM

REFERENCES


REFERENCES


Fritsch:1981:DIU


Friedman:1981:NPP


Smith:1981:ERA


Melgaard:1981:GST


Melgaard:1981:APS


More:1981:AFS

[327] J. J. Moré, B. S. Garbow, and K. E. Hillstrom. Algorithm 566: FORTRAN subroutines for testing unconstrained optimization software...


[332] Geoffrey W. Hill. Evaluation and inversion of the ratios of modified Bessel functions, \( I_1(x)/I_0(x) \) and \( I_{1.5}(x)/I_{0.5}(x) \). *ACM Transactions on Mathematical Software*, 7(2):199–208, June 1981. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


Stewart:1981:ALS


Hill:1981:ASM


OLeary:1981:ASH


Hill:1981:RSD


Hill:1981:RSQ


Fritsch:1981:CIU

REFERENCES


REFERENCES


Dennis:1981:ANE


McAllister:1981:ASP


Duff:1981:APZ


Barrodale:1981:AFP


Carlson:1981:AAI


Razaz:1981:RAF


Shampine:1981:ETS
[355] Kenneth W. Neves. Control of interpolatory error in retarded differential


REFERENCES


[Buckley:1981:AQS]


[Krogh:1982:AAP]


[Deo:1982:AGF]


[Hiebert:1982:EMS]


[Dunham:1982:CBC]


[DuCroz:1981:ASR]

REFERENCES


REFERENCES

Ahrens:1982:CGP


Lewis:1982:IGP


Lewis:1982:AGP


Paige:1982:ALS


Laurie:1982:ACA


Flamm:1982:RHE


Lewis:1982:RMB

[382] John G. Lewis. Remark on “Algorithms 508 and 509: Matrix bandwidth and profile reduction [F1] and a hybrid profile reduction algorithm [F1]”.
REFERENCES


REFERENCES

Garbow:1982:RQA


Dodson:1982:RBL


Buckley:1982:RQS


Morgan:1983:MCA


Greenberg:1983:FDA


Beck:1983:RGA


Hanson:1983:CDE

[402] P. M. Hanson and W. H. Enright. Controlling the defect in existing variable-order Adams codes for initial-value problems. ACM Transac-
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


Amos:1983:APF


Amos:1983:APFb


Gay:1983:ASU


Amos:1983:REI


deDoncker:1984:AAI


deDoncker:1984:ATI

REFERENCES


REFERENCES


REFERENCES


[Gill:1984:POP]


[Alu-Pentini:1984:DEA]


[Alu-Pentini:1984:ADD]


[Regener:1984:MID]


[Coleman:1984:SES]


[Coleman:1984:AFS]

REFERENCES


REFERENCES

December 1984. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


REFERENCES


Norton:1985:AFB


Martello:1985:APM


Liu:1985:MMD


Gan:1985:NCG


Ahrens:1985:SRS


Ward:1985:AAL

REFERENCES


REFERENCES


Hull:1985:PRV


Stewart:1985:NCD


Streit:1985:AAS


Le:1985:EDF


Tischer:1985:ESN

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


June 1987. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


REFERENCES


REFERENCES


REFERENCES


REFERENCES


Ammann:1988:RCR


Bratley:1988:AIS


Robertazzi:1988:BOF


Monahan:1988:CAG


Melhem:1988:MRS


Renka:1988:MIL

REFERENCES


Renka:1988:AQQa


Renka:1988:AQQb


Wan:1988:AMD


Garbow:1988:SIW


Garbow:1988:AFS

[609] Margreet Louter-Nool. Algorithm 663: Translation of Algorithm 539: Basic Linear Algebra Subprograms for FORTRAN usage in FOR-
REFERENCES


REFERENCES


[621] Michael N. Vrahatis. Solving systems of nonlinear equations using the nonzero value of the topological degree. *ACM Transactions on Math-
References

Michael N. Vrahatis. Algorithm 666: CHABIS: a mathematical software


REFERENCES


REFERENCES


REFERENCES


Morgan:1989:FAI


Patterson:1989:AGIa


Patterson:1989:AGIb


Tang:1989:TDI


Vitter:1989:ADH

REFERENCES


REFERENCES


REFERENCES


REFERENCES


Dongarra:1990:SLB


Dongarra:1990:ASL


Cody:1990:PEP


Poppe:1990:MEC


Poppe:1990:AEC

REFERENCES


REFERENCES


September 1990. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


REFERENCES

Tang:1990:TDI


Hopkins:1990:RRK


Amos:1990:RPP


Garbow:1990:RFS


Addison:1991:ADT


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


Bailey:1991:AFS

Alfeld:1991:EAS

Alfeld:1991:AGE

Gustafsson:1991:CTT

Boubez:1992:PED

Lucks:1992:ASM
REFERENCES


REFERENCES


REFERENCES


Hansen:1992:FSG


Demmel:1992:SBA


Ammar:1992:IDC


Toint:1992:LFS


Berntsen:1992:ADA

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

[817] Paul H. Calamai and Luis N. Vicente. Algorithm 728: FORTRAN sub-


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


Fateman:1995:FFP


Kearfott:1995:FER


Dongarra:1995:SDX


Grosse:1995:RM


Demetriou:1995:ALF


Weber:1995:AIG

REFERENCES


Bongartz:1995:CCU


Barry:1995:RVW


Barry:1995:AWF


Hormann:1995:RTS


Rabinowitz:1995:ASA


Goano:1995:ACC

[863] Michele Goano. Algorithm 745: Computation of the complete and incomplete Fermi–Dirac integral. ACM Transactions on Mathematic-
REFERENCES


REFERENCES


LAPACK-based library for the computer manipulation of tensor prod-
1996. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (elec-

[882] I. S. Duff and J. A. Scott. The design of a new frontal code for solv-
ing sparse, unsymmetric systems. *ACM Transactions on Mathematical
Software*, 22(1):30–45, March 1996. CODEN ACMSCU. ISSN 0098-
citations/journals/toms/1996-22-1/p30-duff/.

[883] Roland W. Freund and Noël M. Nachtigal. QMRPACK: a package of
QMR algorithms. *ACM Transactions on Mathematical Software*, 22
(1):46–77, March 1996. CODEN ACMSCU. ISSN 0098-3500 (print),
journals/toms/1996-22-1/p46-freund/.

[884] Bo Kagström and Peter Poromaa. LAPACK-style algorithms and soft-
ware for solving the generalized Sylvester equation and estimating the
separation between regular matrix pairs. *ACM Transactions on Mathe-
matical Software*, 22(1):78–103, March 1996. CODEN ACMSCU. ISSN
0098-3500 (print), 1557-7295 (electronic). URL http://www.acm.org/
pubs/citations/journals/toms/1996-22-1/p78-kagstrom/.

[885] Mauricio G. C. Resende, Panos M. Pardalos, and Yong Li. Algorithm
754: Fortran subroutines for approximate solution of dense quadratic
assignment problems using GRASP. *ACM Transactions on Mathematical
Software*, 22(1):104–118, March 1996. CODEN ACMSCU. ISSN 0098-
citations/journals/toms/1996-22-1/p104-resende/.

March 1996. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295
REFERENCES


REFERENCES


Sosonkina:1996:NEG


Macleod:1996:AMS


Blom:1996:AVV


Blom:1996:AVVb


Andersen:1996:MSM

REFERENCES


REFERENCES


REFERENCES


Bouaricha:1997:ASS


Cabay:1997:AEW


Geurts:1997:AFP


Blackford:1997:PEN


Ho:1997:DND

REFERENCES


[925] Pei-Chi Wu. Multiplicative, congruential random-number generators with multiplier $\pm 2^{k_1} \pm 2^{k_2}$ and modulus $2^p - 1$. *ACM Transactions on
REFERENCES


REFERENCES


REFERENCES


REFERENCES


[955] Bo Kågström, Per Ling, and Charles Van Loan. GEMM-based level 3 BLAS: high-performance model implementations and performance eval-
REFERENCES


REFERENCES


Atkinson:1998:AAB


Govaerts:1998:IHD


Giering:1998:RAC


Berzins:1998:SAS


Anonymous:1998:AI


Davis:1999:CUM

REFERENCES


Pryce:1999:TPS


Pryce:1999:AST


Renka:1999:ACC


Renka:1999:ATC


[982] Dexuan Xie and Tamar Schlick. Remark on Algorithm 702: The updated truncated Newton minimization package. ACM Transactions on
REFERENCES


Gay:1999:SAF


Flores:1999:CFR


Heinkenschloss:1999:IBO


Gockenbach:1999:CCL


Gautschi:1999:AGG

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


Wenzel:2003:IWD


Hong:2003:AIS


Li:2003:SSD


Dhooge:2003:MMP


Henrion:2003:GGO


Sarra:2003:SSP


Quintana-Ortí:2003:FDA

REFERENCES


REFERENCES


REFERENCES

468, December 2003. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


REFERENCES


REFERENCES


REFERENCES


Tang:2005:DNI


Mu:2005:PMN


Ledoux:2005:MMP


Gao:2005:AMS


Klimke:2005:ASP


Shellman:2005:ARF


Davis:2005:ACS

REFERENCES


REFERENCES

Foster:2006:AEA


Hasselman:2006:RAF


Jorain:2006:AHT


Quintana-Orti:2006:IPR


Forth:2006:EOI


Kirby:2006:OFL

REFERENCES


REFERENCES

September 2006. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


REFERENCES

521–532, December 2006. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


REFERENCES

2007. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


REFERENCES


REFERENCES


Beebe:2007:AQP


Espelid:2007:AGD


LEcuyer:2007:TCL


Pesch:2007:HSF


Bangerth:2007:DIG


Bai:2007:PSB
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


Dominguez:2009:ASM


Jansson:2009:ADS


Gordon:2009:CRR


Dumas:2009:DLA


Linhart:2009:ACL


Caliari:2009:APL

REFERENCES


REFERENCES


### REFERENCES


[1285] Souji Koikari. Algorithm 894: On a block Schur–Parlett algorithm for \( \varphi \)-functions based on the sep-inverse estimate. *ACM Transactions on
REFERENCES


REFERENCES


Sarra:2010:AMP


Torres:2010:ADT


Vlachos:2010:ALP


Rasch:2010:EIE


Chen:2010:ECF


Krogh:2010:SSO


Rutten:2010:EFP


REFERENCES

Celledoni:2010:AFF


Haggard:2010:CTP


Gonzalez-Pinto:2010:CBT


Gonnet:2010:IRA


Yamazaki:2010:APS


Anand:2010:UTE


Ollivier-Gooch:2010:IDS

[1324] Carl Ollivier-Gooch, Lori Diachin, Mark S. Shephard, Timothy Tautges, Jason Kraftcheck, Vitus Leung, Xiaojuan Luo, and Mark Miller. An interoperable, data-structure-neutral component for mesh query and


[1330] Tiancheng Li and Ian Robinson. Algorithm 906: *elrint3d* — a three-dimensional nonadaptive automatic cubature routine using a sequence of


REFERENCES


References


REFERENCES


REFERENCES


[1376] Benjamin A. Burton and Melih Ozlen. Computing the crosscap number of a knot using integer programming and normal surfaces. *ACM...


February 2013. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).


REFERENCES

CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). See remark [1534].


REFERENCES


REFERENCES


Seibold:2014:SSO


Langr:2014:APP


Smigaj:2015:SBI


Muller:2015:ECC


Lorenz:2015:SBP


Pryce:2015:DMT


Janna:2015:FSP

[1441] Carlo Janna, Massimiliano Ferronato, Flavio Sartorettto, and Giuseppe Gambolati. FSAIPACK: a software package for high-performance fac-
REFERENCES


REFERENCES


[1454] Clément Jamin, Pierre Alliez, Mariette Yvinec, and Jean-Daniel Boissonnat. CGALmesh: a generic framework for Delaunay mesh genera-
REFERENCES

Graillat:2015:ECF


Dalton:2015:OSM


Naumann:2015:ADN


Wang:2015:A


Dong:2015:APL


Granat:2015:A

REFERENCES


[1467] Benjamin A. Burton, Thomas Lewiner, João Paixão, and Jonathan Spreer. Parameterized complexity of discrete Morse theory. *ACM Trans-
REFERENCES


Mei:2016:CDC

Sayed:2016:WCR

Lecuyer:2016:ALB

Alvarez-Cubero:2016:AVL

Ibanez:2016:PPU

Abdelfattah:2016:KOL

Jeannerod:2016:RIE
REFERENCES


REFERENCES


REFERENCES

Garrett:2016:NAB


vanderHoeven:2016:MSA


Sukkari:2016:HPQ


Filip:2016:RSI


Ong:2016:ARM


Sluanschi:2016:AAD

Yamazaki:2016:SPV


Rupp:2016:PIS


Low:2016:AME


Agullo:2016:IMS


Lee:2016:TOI


Gould:2016:NPP


REFERENCES


REFERENCES


Margherita Porcelli and Philippe L. Toint. BFO, a trainable derivative-free brute force optimizer for nonlinear bound-constrained optimization and equilibrium computations with continuous and discrete variables.
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


reduce the lattice structure of linear congruential generators, but the second improves both dramatically.
