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Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254
FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)
WWW URL: https://www.math.utah.edu/~beebe/

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Title word cross-reference

$(2s)(2p)$ [HH36a]. $2p^2$ [Ste39]. $4n$ [MM36]. 6×9 [Gel57]. $^{+}$ [Har33d, Har34b, Har35c, HH36c, HHM40b, Pra52, Wil40]. $^{++}$ [HHM40b, HHM40a]. $^{+++}$ [HHM40b]. $^{++++}$ [HHM40b]. $^{+13}$ [Fro57d]. $^{+2}$ [Har55a, Har60]. $^{+3}$ [FH57, Har35c]. $^{+4}$ [FH57]. $^{-}$ [BP54, Har33d, Har35c, HH36b]. ^{1} [HH36a]. ^{3} [HH36a]. ^{4} [MM36]. ^{5} [MM36]. ^{6} [MM36]. $_{4}$ [HdLKP34, HdLKP35]. $Ax = \lambda Bx$ [Bee78a]. β [Har23a]. $\chi(x) = \int_0^\infty \exp(-(x - w^2)^2)\, dw$ [HJ39]. $jy'' + (2/x)y' - y^2 = 0$ [Har37b]. q [CD74b]. ρ [CM52]. S [CD74a]. $\sqrt{(1/2)\pi}e^{(1/2)\pi\rho^2} \int_\rho^\infty e^{-(1/2)i\pi\lambda^2}\, d\lambda$ [CM52]. $Z = 1$ [Des73]. $Z = 120$ [Des73].

-rays [Har23a]. **-Step** [CD74a].

17 [Mil45a]. **1924** [Ano22]. **1944** [Mil45a, Mil45b]. **1955** [Mul57]. **1957** [Gel57]. **1961** [GY62]. **1971** [Phi79]. **1978** [MS78]. **1993** [BCEP94].

2004 [CK06]. **2010** [CK14]. **20th** [BW01a]. **235** [Rei74].

3-butadiene [Nes55b].

51 [RB37a].

60-Year [Rei74].

'93 [IEE93, Ano88].

A. [Har47a, Van11, WTE$^+$85]. **A.E.C.** [Rei74]. **Abiding** [Rei74]. **Above** [WTE$^+$85]. **absorption** [HdLKP34, HdLKP35]. **Accelerating** [SAY$^+$18]. **Account** [Ros63, Ros88]. **ACE** [AWL$^+$88, Har47a]. **across** [Cle53]. **Advisory** [KB58]. **Age** [Rei74, Bow96, WTE$^+$85]. **air** [Smi90]. **Aircraft** [Har25b, Van11]. **Al** [Har35c]. **Aleksandrovich** [OR06, VKL75]. **Alfred** [AB74]. **algebraic** [MS78]. **Algebraically** [CD74b]. **Algorithm** [BO98, CD74a, CD74b, Nes65, PY24, PHM16, PS21, UF89, CW81, CWL83, Dav80, HVCY21, Kal80, KBB$^+$20, MS93, Sha70]. **Algorithms** [CW85c, CW85a, Cul94a, Cul94b, Cul94c, CZ02, Cul96, CW02, MS78, MRD92]. **Alkali** [Lin24a, Lin24b]. **Alkali-metals** [Lin24a]. **Allies** [AWL$^+$88, WTE$^+$85]. **Almlöf** [LH17]. **Alphen** [Din53c]. **alternating** [CHPT39]. **Alternative** [Sma01]. **Aluminium** [Har26b]. **Aluminium-like** [Har26b]. **Amazing** [Ano48]. **America** [Mir21]. **analog** [Bow96]. **Analogue** [Sma01]. **Analyse** [Sad89]. **Analyser** [Ano35, Ano39, Har49a, MWBS38, Por36, Ano49, Cra38, Cra47, HP35, Har35b, Har36a, HP38, HN38a, HI38, Har40a, Har40b, Har46a]. **Analysers** [Hol94]. **analyseur** [HP39]. **Analysis** [BW01a, GHF57, Har52b, Har56b, Har58e, BW01b, Bus36, CW84, Har51d, Mai21, B.53, Dav59, Dwy55, Har53a, Jon53]. **Analytical** [Har49i]. **Analyzer** [Owe86, Ros37, Bun90, Bus31, HN38b, HP39, Hol96, Sha41]. **anode** [Har41a, Har42a, Har42b]. **Anti** [Har25b, Van11]. **Anti-Aircraft** [Har25b, Van11]. **Antireductionism** [Mar18]. **Antiréductionnisme** [Mar18]. **any** [Boy50, Har24a]. **Appleton** [Unz66]. **Application** [HP39, May59, Ste39, Har36a, HP38, HI38, Har42b, Har46a, Har52a, Mar17, HP39]. **Applications** [Har26a, Por36, Swi28, Har23c, Har35d, HN38a, HN38b, Har40a, Har40b]. **applied** [Har42a]. **Approach** [Fro77, FBJ97]. **Approximate** [Har34a, Har55a, Har56a, SWTM01, Har23c, HI33, Har37c, Foc30b]. **Approximation** [Gás54, LPLH63, Pra52, Löw55c]. **arbitrary** [WGG20]. **Arduous** [Rei74]. **argon** [HH38b, Har60]. **argument** [Har49g]. **arithmetic** [Har48a]. **Arnoldi** [Cul96, CZ02, PS21]. **assembly** [Tem50]. **Associated** [Ros63, Ros88, HJ48, MRD92]. **Asymptotic** [Din58a, Din58b, Din58c]. **Atom** [Bor27, Har28a, Har28b, Har28c, Har29b, Har29a, Har29d, HI33, HB33, Har29a, Fli28, Fow27a, Fow27b]. **Atomic**

[Bar60, Bla58, Cou58, DHR55, FBJ97, Gau28, Gel57, Har32, Har57b, Har58d, How59, Lin24a, Lin24b, May59, Mul57, Rei74, Rid56, RAC+29, Swi26, CGD+93, DHC+91, Fro57a, Fro58, Gra79, Har23d, Har25a, Har25e, Har33d, Har34a, Har34b, HH35a, Har35c, Har47b, Har55b, Har57a, MS36, Tru59]. **Atoms** [Fro77, Hyl63, Wil88, Des73, Har24b, Har24c, Har26b, Har36b, Har56a]. **August** [MS78]. **Auspices** [Mul57]. **Austausch** [Foc30a]. **Austrittsarbeit** [TB32]. **autobiography** [Lin85a, Lin85b, Lin85c]. **Automatic** [AWL+88, Har50a, Har52a, Jon04, May59, WWG54, BS54, Har51b]. **Automatische** [Har51b]. **Award** [Rei74].

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C [AWL+88, Harxxb]. **Ca** [HH35a]. **calcium** [HH38a]. **Calculated** [Tha39]. **Calculating** [Ano34, Ano46b, Ano88, AWL+88, Cer86, Har46b, Har47c, Har47h, Har49h, Har50d, Har53c, Har84a, Har84b, Har12, Jon04, WTE+85, WWG54, Har40b, Har46c, Har46e, Har47e, Har47f, Har47g, Har47d, Har49b, Har50a, Har52a, Ret82, Ull52, All50, Ano51, Arn48, Bro47, Chu53, Goo51, Har51a, K.47, L.47, Mat50, Vaj51]. **Calculation** [Bar60, Bla58, Cou58, Fel74, Gel57, Har53b, Har57b, How59, May59, Mul57, Ste39, Boy50, BP54, Dav75, EHI+46, HdLKP34, HdLKP35, HI38, Har42a, Har47b, May57, SBPH73, Tru59]. **Calculations** [AAW+17, Fro57b, Har20a,

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D [Ano46b, Ano51, Arn48, B.53, Bar60, Beu62, Bla58, Bro62, Bro47, Cer86, Chu53, Cou58, Dav59, Dwy55, Fli28, Fow27a, Fow27b, Goo51, Har51a, Har53a, How59, Jon53, K.47, L.47, Mat50, Mul57, Tru59, Ull52, Vaj51, Mar18]. **D.** [WTE+85]. **Darwin** [Tho63]. **David** [CK06]. **Davidson** [BO98, CPS94, Dav80, Kal80, KBB+20, LWX24, MS86, Mor90, Mor92, PY24, PHM16, Sad89, SWTM01, SBFV96, SV00, SF93, SF94, UF89]. **Davidson-Type** [BO98]. **Dawson** [Din58b]. **Dead** [Rei74]. **decades** [Mar17]. **December** [BCEP94, CK06]. **defect** [Har25e]. **defence** [Smi90]. **Defiance** [Sum14]. **deflection** [Har23a]. **degenerate** [Löw55d]. **Degrees** [WTE+85]. **d'énergie** [HP39]. **densities** [Har60]. **Density** [Löw63, Löw55b, Zan13]. **Depend** [Ano48]. **derivation** [Unz66]. **derivative** [HJ48]. **derived** [Har43a]. **Description** [Ros63, Ros88]. **determinant** [BTSB22]. **determination** [CD55, CD57, Har42b]. **determined** [Kry31]. **Developing** [SG00]. **Development** [AWL+88, Ros63, Ros88, Mai21, MS11, Owe94]. **Developments** [Ano88, AWL+88, BW01a, Cer86, Har46b, Har47h, Har84a, Har84b, L.47, WTE+85, Har47e, Har47f, Har47g, Har47d, Bro47, Mat50]. **diagnosis** [Gil51]. **Diagonalization** [LSAS01, LGGT93, Nes65]. **Diamagnetic** [Din52a]. **diamagnetism** [Din53c]. **diatomic** [JH35]. **Dictionary** [Hyr08]. **dielectric** [CHPT39]. **Dies** [Ano74, Ano93]. **Differensialanalysatoren** [Ros37]. **different** [Cle53, Har24b, Har26b]. **Differential** [Ano35, Ano39, Bun38, CN47, Har49a, Hol94, Lei54, MWBS38, Owe86, Por36, Ros37, Ano49, Bun90, Bus31, Cra38, Cra47, Har33c, HP35, Har35b, Har36a, HW37, HP38, HN38a, HN38b, Har38, HI38, HP39, Har40a, Har40b, Har46a, Har50b, Har58b, Harxxg, Lan50, Sha41]. **différentiel** [HN38b, HP39]. **difficulties** [Mar17]. **Diffraction** [JWH28, Sen52, Cle51, Har54]. **Diffusion** [AWL+88, GGG11, Har58a]. **Digital** [AWL+88, Gon24, WWG51, WWG54, CD55, CD57, Har47d, Har48b]. **Dilemma** [Löw63]. **dimension** [ZJ23]. **dimensional**

[AFS82, Cle51, Dom49a, Tem50]. **diplon** [BP35a]. **Dirac** [Des73, Din58c, Har29b]. **direct** [CD55, CD57]. **Discussion** [LPLH63, RAC+29, Har28b, HNW+48]. **disk** [Sco45]. **disorder** [Dom49b, Dom49a]. **dispersion** [Har33b]. **Disputes** [Gon24]. **Dissipation** [Bun59]. **distorsion** [HP39]. **distortion** [HP39]. **distortionless** [HP38]. **Distributed** [PY24]. **Distribution** [CHIS39, Har49e, BFH20, Har29b, Har29a, Har42b]. **distributions** [CHPT39]. **Doran** [AWL+88]. **Doublet** [Har25c]. **Douglas** [All50, Cro08, DA04, Gel57, Harxxa, Harxxf, Harxxd, Harxxe, Harxxc, Harxxb, Ano46a, Ano52, Dar58, Fro03, GS11a, Hol94, Med88, Swi87, Cro05]. **Dr** [Har25e]. **Dr.** [Rei74]. **draft** [HSxx, Harxxi, Harxxj, Harxxk, Harxxl, Harxxm, Harxxn, Harxxo, Harxxp, Harxxq]. **Durch** [Gás54]. **Dvorak** [WTE+85]. **Dynamics** [Lei54].

E. [Harxxb, Smi90, WTE+85]. **Early** [Cro90, Hyl63, Med88, Owe86, Mai21]. **Earth** [Cle53, HW52]. **Eckert** [Cer86]. **ed** [AWL+88]. **Edinburgh** [Mai21]. **Edmund** [Mai21]. **Edn.** [Ano51]. **eds** [AWL+88]. **EDSAC** [Gil51, Whe50, WWG54]. **effect** [Din53c, HS37, MHP37]. **Effects** [KS65, Löw55a, Sla51a, Wil88, Löw55d, Pyy88]. **eigenpairs** [SF94]. **eigenproblems** [SBFV96]. **eigensolutions** [Ret82]. **Eigensolver** [AAW+17, Kny01, SAY+18]. **Eigenspace** [CD74b]. **Eigenvalue** [Arb16, Bee78a, Bee78c, CW85c, CW85a, Cul94a, Cul94b, Cul94c, Saa11, Sha78, SV00, SF93, UF89, Arn51, CW85b, Cul96, CW02, Lan50, Mor90, MS93, SSL02, ZJ23]. **Eigenvalues** [Bee78b, BO98, CD74b, Dav93, LWX24, CW81, Dav75, HVCY21, Liu78, MS86, Mor92, MRD92, Sha70, SBPH73]. **Eigenvector** [PS21]. **Eigenvectors** [Bee78b, Dav78, Dav93, Fel74, Dav75, HVCY21, Liu78, MRD92, Sha70, SBPH73]. **eight** [BP54]. **Einstein** [Din58c]. **elaboration** [Mar17]. **electric** [NHP36]. **Electrical** [Ano39, HN38a, HN38b, Har43b]. **electricity** [Har29a]. **electromagnetic** [Har23b, Har29c, Har31b]. **Electron** [Hyl63, Ste39, Wil53, DHC+91, Dir29, Fro57c, Har24b, Har42b, Ste37]. **Electronic** [AFS82, Ano46b, Boy50, BP54, BS54, Sma01, WWG51, WWG54, BTSB22, Har26b, Har46c, Har46d, Har50c, Har48c, Nes55b]. **Electrons** [Har31c, CGD+93, Din52c, Din52b, Din53a, Din53b, Har29b, Swi36, TB32]. **électrotechnique** [HN38b]. **Elektrizitätsverteilung** [Har29a]. **Elektronen** [TB32]. **element** [Har24a]. **elementary** [cHC48]. **Elements** [KW03]. **Ellipse** [Har37a]. **Elliptic** [Har49e, LWX24]. **emission** [Har42b]. **End** [Fro00]. **Enduring** [Lon16]. **Energies** [Ste39, CGD+93, DHC+91, MM36]. **Energy** [BR37, Ing31, Pra52, WP57, JH35, JWH28, Tha39]. **Eng** [Ano51]. **Engine** [Har49i]. **Engineering** [Ano39, HN38a, HN38b]. **ENIAC** [Ano46b, Har46c, Har46d, Har48c]. **Enigma** [AWL+88, WTE+85]. **enthusiasm** [Bow96]. **Entwicklung** [MS11]. **Equation** [Bun40, Har49f, Lei54, Sla51a, Har37c, Har37b, Har58a, Kry31, Luz31, Unz66, Luz31]. **Equations** [Ano34, Bun38, Coo48, CN47, Har49e, KS65, Pra52, Bus31,

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F [Har35c]. **F.R.S.** [Ano52]. **factor** [Har25a]. **Factorization** [JOK13]. **factors** [Din58a, Din58b, Din58c]. **Falkner** [Har37c]. **Fall** [Mir21, WTE+85]. **FCI** [OJS90]. **Fe** [Fro57d, WP57]. **February** [CK06]. **Feler** [Bee78b]. **Fermi** [Din58c]. **Festkolloquium** [GGG11]. **few** [Dav75, MRD92, SF94]. **Field** [Fro57b, Har28a, LBV20, Sla72, Wil37, Wil40, Wil53, CHPT39, Foc30a, Fro57c, Fro57d, Har23a, Har28b, Har28c, Har29d, Har31b, Har34a, HH35b, HH36a, HH36b, HH36c, HH38a, HH38b, HHS39, HHM40b, HHM40a, HHM41, HH48, HW52, Juc39, May57, Ste37, Swi35, Swi36]. **Fields** [Bun90, Gau28, Din53a, Din53b, Gra61, Har33d]. **film** [CM49]. **Finding** [Bee78b, SF94]. **fine** [Cor33, HdLKP34, HdLKP35]. **Finite** [LBV20]. **first** [Fro57d, Har50b, Har56a]. **first-order** [Har50b]. **Fischer** [Cro05, Hib19, Joh12, Roo94]. **Fischer-Hjalmars** [Joh12, Roo94]. **Fisher** [Fli28, Fow27a, Fow27b]. **Five** [Jon04, Rei74]. **flat** [Cle53]. **Flow** [Cor33, Har49f, Har53b, Lom60, CH48a, CH48b, EHI+46, JSW+44]. **Fluid** [Lei54]. **Fluide** [GGG11]. **Fluids** [Ros63, Ros88]. **fly** [RBM+23]. **Fock** [LPLH63, BTSB22, Des73, Fro77, Gás54, Har58c, Löw55a, Löw55c, Löw55d, Löw58, Löw60, Löw63, Mar16, Mar17, Mar18, OR06, Pra52, Sla51a, Sla51b, VKL75, WGG20, WP57]. **Fockschen** [Gás54]. **Fok** [Ano74]. **forefathers** [Zan13]. **Foreword** [Har51c]. **Forgotten** [Mir21]. **formula** [Har33b]. **Found** [Pra52, WP57]. **Four** [Bun38]. **Fourth** [Har43b]. **Fowler** [Mil45b, Mil44, Mil45a]. **fraktionaler** [GGG11]. **Framework** [SG00]. **Francis** [Cou73]. **Free** [Har31c]. **French** [HN38b, HP39, Luz31, Mar18]. **frequencies** [Kry31]. **Frequency** [Coo48]. **Fresnel** [Din58b]. **Fritz** [Harxxc]. **Froese** [Cro05, Hib19]. **full** [OJS90]. **Function** [Löw60, Gás54, HI33, Har35d, HJ39, HJ48, TB32]. **functional** [Zan13]. **Functions** [Har58d, Lew39, Pra52, Ste39, WP57, Boy50, BP54, BS54, Din58c, DHR55, Fro57a, FH57, Fro58, Har33d, Har34a, Har34b, HH35a, Har35c, HH38c, Har49g, Har55a, Har55b, Har56a, Har57a, Tha39]. **Fund**

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Haas [Din53c]. **Hackers** [WTE+85]. **Hartree** [Ano51, Ano52, Ano88, Beu62, Bro62, Cro05, Gás54, Gel57, Hil43, LPLH63, RB37a, WTE+85, WP57, All50, Ano46a, Ano46b, Arn48, AWL+88, B.53, Bar60, BTSB22, BR37, Bla58, Bro47, Bun90, Cer86, Chu53, Cou58, Cro08, Dar58, DA04, Dav59, Dwy55, Fli28, Fow27a, Fow27b, Fro77, Fro03, Gás54, Gau28, GS11a, Gon24, Goo51, Har51a, Har53a, Harxxa, Harxxf, Harxxd, Harxxe, Harxxc, Harxxb, Hol94, How59, Jon53, K.47, L.47, Lew39, Löw55a, Löw55c, Löw55d, Löw58, Löw60, Löw63, Mar16, Mar17, Mat50, Med88, Mul57, Pra52, RB37b, SLT+10, SLG+10, Sla30, Sla51a, Sla51b, Ste39, Swi87, Tru59, Ull52, Unz66, Vaj51, WGG20, Zan13]. **Harvard** [AWL+88]. **Haverford** [Mul57]. **Having** [Bun38]. **head** [BFH20]. **Heat** [CN47, EHI+46, JSW+44]. **Heat-Conduction** [CN47]. **Heavy** [KW03]. **Helium** [Lew39, CM49, Gau29, HI33, Tem49]. **Her** [Hib19]. **Herbert** [GY62]. **Hg** [HH35a]. **High** [AAW+17, BFH20, CD55, CD57]. **high-speed** [CD55, CD57]. **highest** [SBPH73]. **Hill** [Van11]. **Historical** [BW01a, Har48b]. **History** [AWL+88, GS11b, KHFA67, Nas90, Wil97, Sha98]. **Hjalmars** [Joh12, Roo94]. **Howard** [Mil44, Mil45a, Mil45b]. **Humanist** [Joh12]. **Hume** [Harxxe]. **Hume-Rothery** [Harxxe]. **Humphrey** [KB58]. **hydrogen** [CF49]. **Hypergrowth** [WTE+85].

I/O [SSL02]. **II** [FH26, CM49, CD57, Cul94b, Din52d, Din58b, Dir03, Dom49a, Fro58, Har26b, Har28b, Har34b, HH36a, HPCS37, Har56b, Lin85b, Löw55c, Löw63]. **III** [Din52a, Din58c, Har28c, HH35a, Harxxg, Lin85c, Löw55d, Löw63, MM36, Ste39]. **im** [Har29a]. **Impact** [Ano88, AWL+88, Cer86, Har46b, Har47h, Har84a, Har84b, Hib19, L.47, WTE+85]. **implementation** [CW81]. **Improve** [PS21]. **Improved** [MRD92, Ste39]. **impulse** [NHP36]. **Inaugural**

[Har47h]. **Include** [Löw55a, Löw55d]. **Including** [KS65, HHS39]. **Incompressible** [Ros63, Ros88, Ste49]. **independence** [KBB+20]. **industry** [Har40b, WTE+85]. **infinite** [Sen52]. **influence** [Din52d]. **Information** [WTE+85]. **Inga** [Joh12, Roo94]. **initial** [Whe50]. **Inmos** [AWL+88]. **Innovation** [AWL+88]. **innovator** [SL11]. **instability** [Har43a]. **Institute** [Ano22]. **Instrumental** [Bus36]. **Instruments** [All50, Ano51, Ano88, AWL+88, Cer86, Chu53, Goo51, Har51a, Har49h, Har50d, Har53c, Har84a, Har84b, Har12, Ull52, Vaj51, WTE+85]. **integral** [Har39, Har54, Lan50]. **integrals** [Din58b, Din58c, Har35d]. **Integration** [Har49c, Har38, Har43b, Har50b, Har58a]. **Intellectual** [Lin85a, Lin85b, Lin85c]. **intensities** [Har28c]. **intensity** [Har25a, WH29]. **Interaction** [AAW+17, LSAS01, HS37, Löw55b, MM36, Nes55a, OJS90, SAY+18, Sha98, SSL02, Swi36]. **internalist** [Mar18]. **internaliste** [Mar18]. **International** [BCEP94]. **interpolation** [Har55b]. **interpretation** [CW80, FH26]. **interpretations** [Löw55b]. **Interview** [Ano46a]. **Introduction** [DF07, Har56b, Harxxg, Harxxh, Roo94, WWG54, Din52c]. **Invention** [Pri10]. **Inventory** [KHFA67]. **investigation** [HB33, JWH28, Sco45]. **ionisation** [Har24a, Har25d, HB33]. **ionised** [FH26, Har25d, Har33b]. **Ionized** [Bun59]. **ionosphere** [HW52]. **ions** [CGD+93, DHC+91, HH38c, MS36]. **Iteration** [SV00, Arn51, Lan50]. **iterative** [Dav75, Har49d, Liu78, Ret82, SAY+18, Sha70, SBPH73]. **itinéraire** [Mar18]. **itinerary** [Mar18]. **IV** [Din52b, Gau29, Har29d, Har35c, HHM41].

J [Cer86, Fli28, Fow27a, Fow27b, WTE+85]. **J.** [WTE+85]. **Jacobi** [LWX24, SBFV96, SV00]. **Jan** [LH17]. **January** [Mil45a]. **Jeffreys** [Wal00, Wil99]. **John** [CK06, Gel57, KB58]. **July** [Mil45a, Phi79]. **June** [CK14].

K-absorption [HdLKP35, HdLKP34]. **Kalamboukis** [Dav80]. **Kelvin** [Har43b]. **Kinetic** [BR37]. **Kinetics** [Klu53]. **Kohn** [BTSB22]. **Korteweg** [GGG11]. **Kozaczuk** [WTE+85, AWL+88]. **Krylov** [Luz31]. **Kvantovaya** [Dir03].

Laboratory [AWL+88, Mai21]. **Labs** [WTE+85]. **Lady** [Gon24, Wal00]. **lag** [CHP36, HPCS37]. **Laminar** [Har49e, Har49f, Ros63, Ros88, CH48a, CH48b]. **L'analyseur** [HN38b]. **Lanczos** [BCEP94, CD74a, CD74b, CW80, CW81, CWL83, CW84, CW85c, CW85a, CW85b, CKW89, Cul94a, Cul94b, Cul94c, Cul96, CW02, CZ02, MS93, ZJ23]. **Landau** [Din53c]. **Large** [Arb16, AWL+88, CD74b, CW85c, CW85a, Cul94a, Cul94b, Cul94c, Dav78, Fel74, Nes65, Saa11, SF93, UF89, CW81, CWL83, CW84, CW85b, CW02, Dav75, Din52c, Din52d, Fro57a, Fro58, Har47d, Har49g, JOK13, Liu78, Mor92, MRD92, RBM+23, Ret82, Sha70, SBPH73, SSL02, SF94, ZJ23].

large-dimension [ZJ23]. **Large-Scale** [AWL+88, JOK13, SSL02]. **Largest** [CD74b]. **Lattice** [JWH28]. **Lawrence** [Phi79, Jam58]. **Layer** [Har49e, CH48a, CH48b, Cra38, Har37c, Har49f]. **Layers** [Ros63, Ros88, Ste49]. **Lecture** [Arb16, Har47h, Har43b]. **Lectures** [Mul57, Har47a]. **Legacy** [Lon16]. **Letter** [Jam58]. **letters** [Smi90]. **Level** [LWX24]. **Levels** [Pra52, WP57]. **Levy** [WTE+85]. **Li** [MM36]. **Libkrylov** [RBM+23]. **library** [RBM+23]. **Life** [Cro05, Fro03]. **light** [MM36]. **ligne** [HP39]. **like** [Har24b, Har24c, Har26b]. **limit** [OJS90]. **limitation** [Har41b]. **limiting** [Fro57a, Fro58]. **Lindsay** [Lin85a, Lin85b, Lin85c]. **line** [HP38, HP39]. **Linear** [Bun38, SV00, Har58a, Lan50, NHP36]. **liquid** [CM49, Tem49]. **Literature** [AWL+88]. **lithium** [Har24c, Har24b]. **lithium-like** [Har24c, Har24b]. **Liu** [PHM16]. **localized** [HVCY21]. **Locally** [Kny01]. **logarithmic** [HJ48]. **Logic** [Pri10]. **London** [Harxxc]. **long** [Har56a, HW52]. **Lösung** [Foc30b]. **Lovelace** [Gon24]. **low** [HS37]. **lowest** [Dav75, Liu78, MRD92, SBPH73]. **lowest-lying** [Liu78]. **lying** [Liu78].

M [Ahl63, AWL+88, Beu62, Bro62, Fli28, Har47a, Phi63]. **M.A** [Ano52]. **Machine** [Ano34, AWL+88, WTE+85, WWG54, Bus31, Har40b, Har46c, Har46d, Har46e, Har48c, Ano46b]. **Machinery** [AWL+88]. **Machines** [Ano48, Ano51, Ano88, AWL+88, Bro47, Cer86, Har46b, Har47c, Har47h, Har49h, Har50d, Har53c, Har84a, Har84b, Har12, Jon04, L.47, Mat50, Pri10, WTE+85, Bun90, Har47e, Har47f, Har47g, Har47d, HNW+48, Har48b, Har49b, Har50a, Har52a, AWL+88, Ull52, WTE+85, All50, Arn48, Cer86, Chu53, Goo51, Har51a, K.47, Vaj51]. **Magnetic** [Din52e, RB37a, RB37b, Sla51a, Din52c, Din52d, Din52a, Din52b, Din53a, Din53b, Din53c, Har23a, Har31b, HW52, Din53a, Din53b]. **magnetron** [Har41a, Har41b, Har42b]. **magnetrons** [Har42a, Har43a]. **Making** [CNT92, CMH+13]. **Man** [Ano48]. **Management** [Owe94]. **Manchester** [Ano35]. **manganese** [Har25d]. **Manual** [AWL+88]. **many** [Dir29, Foc30b, Har29b, JOK13, Löw55b, Löw55c, Löw55d]. **many-body** [Foc30b, JOK13]. **many-particle** [Löw55b, Löw55c, Löw55d]. **March** [Phi79]. **Marshaled** [Rei74]. **Masani** [AWL+88]. **Massachusetts** [Ano22]. **material** [Kry31]. **Mathematical** [Ano88, AWL+88, Cer86, Har46b, Har47h, Har84a, Har84b, JS46, JS56, JS99, KB58, L.47, Mai21, Sha41, SG00, WTE+85, Harxxa, Harxxf, Harxxd, Harxxe, Harxxc, Harxxb, Bro62]. **mathematician** [DA04]. **Mathematics** [Ahl63, Beu62, Bro62, Nic62, Phi63, Leh66]. **Matrices** [CD74b, Dav78, Dav93, Fel74, LSAS01, Nes65, CW81, CWL83, CW84, Dav75, Liu78, Löw55b, MS86, Mor92, MRD92, Ret82, Sha70, SBPH73]. **Matrix** [Cul94a, Cul94b, Cul94c, Löw63, Sha78, SWTM01, Arn51, Cul96, Dav89, HVCY21, RBM+23, SF94]. **matters** [Kry31]. **Maurice** [CK14]. **Maverick** [AWL+88]. **Max** [Fow27a, Fow27b]. **Maxwell** [Lon16]. **May** [Har13]. **MCHF** [FBJ97]. **McLean** [AWL+88]. **Meaning** [Gon24]. **means** [Löw55b]. **Meccano** [Ano49]. **Mechanical** [Har43b, Hol94, Foc30b, HW37, Har38].

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[Gon24] Bernardo Gonçalves. Lady Lovelace's objection: The Turing–Hartree disputes over the meaning of digital computers, 1946–1951. *IEEE Annals of the History of Computing*, 46(1):6–18, January/March 2024. CODEN IAHCEX. ISSN 1058-6180 (print), 1934-1547 (electronic).

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[Goo51] I. J. Good. Book review: *Calculating Instruments and Machines*, by D. R. Hartree. *Journal of the Royal Statistical Society. Series A (General)*, 114(1):106–107, ???? 1951. CODEN JSSAEF. ISSN 0035-9238. URL `http://www.jstor.org/stable/2980914`.

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Grant:1979:RAS

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[GS11a] Kōstas Gavroglou and Ana Simões. Douglas Rayner Hartree: "A computing and classifying physicist". In *Neither Physics nor Chemistry: a History of Quantum Chemistry* [GS11b], chapter 3 [subsection], pages 138–143. ISBN 0-262-01618-4 (hardcover), 0-262-29875-9 (e-book), 1-283-30283-7. LCCN QD462 .G38 2012. URL `http://mitpress.mit.edu/9780262016186`.

Gavroglou:2011:NPN

[GS11b] Kōstas Gavroglou and Ana Simões. *Neither Physics nor Chemistry: a History of Quantum Chemistry*. MIT Press, Cambridge, MA, USA, 2011. ISBN 0-262-01618-4 (hardcover), 0-262-29875-9 (e-book), 1-283-30283-7. xiv + 351 pp. LCCN QD462 .G38 2012. URL `http://mitpress.mit.edu/9780262016186`.

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[Har12] D. R. Hartree. Observations on certain periodic properties of numbers. *J. Bedales School Sci. Soc.*, (2):29, 1912.

Hartree:1913:MRC

[Har13] D. R. Hartree. The May races, Cambridge, 1913. *Bedales Chronicle*, ??(??):??, June 1913.

Hartree:1920:BCa

[Har20a] D. R. Hartree. Ballistic calculations. *Nature*, 106(2657):152–154, September 30, 1920. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic).

Hartree:1920:BCb

[Har20b] D. R. Hartree. Ballistic calculations. *Nature*, 106(2659):232, October 14, 1920. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://www.nature.com/articles/106232a0`.

Hartree:1923:CNU

[Har23a] D. R. Hartree. On the correction for non-uniformity of field in experiments on the magnetic deflection of β-rays. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 21(??):746–752, ???? ??, 1923. CODEN PCPSA4. ISSN 0008-1981.

Hartree:1923:PCT

[Har23b] D. R. Hartree. On the propagation of certain types of electromagnetic waves. *Philosophical Magazine*, 46(273):454–460, 1923. CODEN PHMAA4. ISSN 0031-8086. URL `https://www.tandfonline.com/doi/full/10.1080/14786442308634268`.

Hartree:1923:SAN

[Har23c] D. R. Hartree. Some approximate numerical applications of Bohr's theory of spectra. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 21(??):625–641, ???? 1923. CODEN PCPSA4. ISSN 0008-1981. URL `https://www.biodiversitylibrary.org/item/88477#page/653/mode/1up`.

Hartree:1923:ASR

[Har23d] D. R. Hartree, B.A. On atomic structure and the reflection of X-rays by crystals. *Philosophical Magazine*, 46(276):1091–1111, 1923. CODEN PHMAA4. ISSN 0031-8086.

Hartree:1924:SME

[Har24a] D. R. Hartree. Some methods of estimating the successive ionisation potentials of any element. *Proceedings of the Cambridge Philosoph-*

ical Society. Mathematical and physical sciences, 22(3):464–474, September 20, 1924. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1924PCPS...22..464H`.

Hartree:1924:SRB

[Har24b] D. R. Hartree. Some relations between the optical spectra of different atoms of the same electron structure. I. — Lithium-like and sodium-like atoms. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 106(739):552–580, November 1, 1924. ISSN 0950-1207 (print), 2053-9150 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1924RSPSA.106..552H`.

Hartree:1924:SSL

[Har24c] D. R. Hartree. The spectra of some lithium-like and sodium-like atoms. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 22(3):409–425, September 20, 1924. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1924PCPS...22..409H`.

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[Har25a] D. R. Hartree. The atomic structure factor in the intensity of reflection of X-rays by crystals. *Philosophical Magazine*, 50(295):289–306, 1925. CODEN PHMAA4. ISSN 0031-8086. URL `https://www.tandfonline.com/doi/full/10.1080/14786442508634740`.

Hartree:1925:CTB

[Har25b] D. R. Hartree. Contribution to *Text-Book of Anti-Aircraft Gunnery*. Report 1, His Majesty's Stationery Office, London, UK, 1925.

Hartree:1925:DTS

[Har25c] D. R. Hartree. Doublet and triplet separations in optical spectra as evidence whether orbits penetrate into the core. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 22(6):904–918, November 1925. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1925PCPS...22..904H`.

Hartree:1925:IPI

[Har25d] D. R. Hartree. The ionisation potential of ionised manganese. *Nature*, 116(2914):356, September 5, 1925. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1925Natur.116Q.356H`.

Hartree:1925:NDT

[Har25e] D. R. Hartree. Note on Dr Turner's paper on 'Quantum defect and atomic number'. *Philosophical Magazine*, 49(290):390–396, 1925. CODEN PHMAA4. ISSN 0031-8086. URL `https://www.tandfonline.com/doi/abs/10.1080/14786442508634615`.

Hartree:1926:SQA

[Har26a] D. R. Hartree. *Some Quantitative Applications of Bohr's Theory of Spectra*. Ph.D. thesis, Faculty of Physics and Chemistry, University of Cambridge, Cambridge, UK, October 9, 1926. ???? pp. URL `https://idiscover.lib.cam.ac.uk/permalink/f/iojq9k/44CAM_ALMA21428192490003606; https://www.proquest.com/pqdtglobal/docview/301187054`.

Hartree:1926:SRB

[Har26b] D. R. Hartree. Some relations between the optical spectra of different atoms with the same electronic structure. Part II. Aluminium-like and copper-like atoms. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 23(3):304–326, July 1926. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1926PCPS...23..304H`.

Hartree:1928:WMAa

[Har28a] D. R. Hartree. The wave mechanics of an atom with a non-Coulomb central field. Part I. Theory and methods. *Mathematical proceedings of the Cambridge Philosophical Society*, 24(1):89–110, January 1928. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1928PCPS...24..426H`. Page 91 of this paper introduces atomic units for *length* ($a_H = h^2/(4\pi^2 me^2)$, the radius of first Bohr orbit of hydrogen), *charge* (e, the electron charge), and *mass* (m, electron mass). From these are derived the *unit of action* ($h/(2\pi)$), the *unit of energy* (e^2/a, twice the ionization energy of hydrogen), and the *unit of time* ($1/(4\pi cR)$). The value R is the Rydberg constant. Atomic units have since been in wide use in quantum science, to avoid dependence of calculations on physical constants whose accuracy improves over time, but some are still known only to a few decimal digits.

Hartree:1928:WMAb

[Har28b] D. R. Hartree. The wave mechanics of an atom with a non-Coulomb central field. Part II. Some results and discussion. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sci-*

ences, 24(1):111–132, January 1928. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1928PCPS...24..111H`.

Hartree:1928:WMAc

[Har28c] D. R. Hartree. The wave mechanics of an atom with a non-Coulomb central field. Part III. Term values and intensities in optical spectra. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 24(3):426–437, July 1928. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1928PCPS...24...89H`.

Hartree:1929:EIA

[Har29a] D. R. Hartree. Die Elektrizitätsverteilung im Atom. (German) [The distribution of electricity in the atom]. *Physikalische Zeitschrift*, 30 (??):517–518, ???? ??, 1929. CODEN PHZTAO. ISSN 0369-982X. Summary of lecture at Zürich conference.

Hartree:1929:DCC

[Har29b] D. R. Hartree. The distribution of charge and current in an atom consisting of many electrons obeying Dirac's equations. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 25(2):225–236, April 1929. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1929PCPS...25..225H`.

Hartree:1929:PEW

[Har29c] D. R. Hartree. The propagation of electromagnetic waves in a stratified medium. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 25(1):97–120, January 1929. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1929PCPS...25...97H`.

Hartree:1929:WMA

[Har29d] D. R. Hartree. The wave mechanics of an atom with a non-Coulomb central field. Part IV. Further results relating to the optical spectrum. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 25(3):310–314, July 1929. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1929PCPS...25..310H`.

Hartree:1931:OEP

[Har31a] D. R. Hartree. Optical and equivalent paths in a stratified medium, treated from a wave standpoint. *Proceedings of the Royal So-*

ciety of London. Series A, Containing Papers of a Mathematical and Physical Character, 131(817):428–450, May 1931. ISSN 0950-1207 (print), 2053-9150 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1931RSPSA.131..428H`.

Hartree:1931:PEW

[Har31b] D. R. Hartree. The propagation of electromagnetic waves in a refracting medium in a magnetic field. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 27(1): 143–162, January 1931. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1931PCPS...27..143H`.

Hartree:1931:WMF

[Har31c] D. R. Hartree. The wave mechanics of free electrons. *Nature*, 128(3219):47–49, July 11, 1931. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1931Natur.128...47H`.

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[Har32] D. R. Hartree. Review: *The Constitution of Atomic Nuclei and Radioactivity* by George Gamow. *Mathematical Gazette*, 16(220): 284–285, October 1932. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL `http://www.jstor.org/stable/pdfplus/3605938.pdf`.

Hartree:1932:M

[Har33a] D. R. Hartree. Mechanics. UK National Archives papers, 1932–1933. URL `https://discovery.nationalarchives.gov.uk/details/r/ed992106-f3e4-4699-a800-46303e2fd2d9`. Reference CSAC 45.9.76/1: Book on Dynamics: Correspondence with S. C. Roberts (Secretary to Syndics, C.U.P.) and with Dr. Swirles; Hartree's outline sketches for chapter contents 1–19.

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[Har33b] D. R. Hartree. The dispersion formula for an ionised medium. *Nature*, 132(3346):929–930, December 16, 1933. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1933Natur.132..929H; https://www.nature.com/articles/132929a0`.

Hartree:1933:PMN

[Har33c] D. R. Hartree. A practical method for the numerical solution of differential equations. *Memoirs and Proceedings of the Manchester*

Literary and Philosophical Society (Manchester Memoirs), 77(??): 91–107, ???? ??, 1933. CODEN MPMLAQ. ISSN 0076-3721.

Hartree:1933:RCA

[Har33d] D. R. Hartree. Results of calculations of atomic wave functions. I. — Survey, and self-consistent fields for Cl^- and Cu^+. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 141(844):282–301, August 1, 1933. ISSN 0950-1207 (print), 2053-9150 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1933RSPSA.141..282H`.

Hartree:1934:AWF

[Har34a] D. R. Hartree. Approximate wave functions and atomic field for mercury. *Physical Review*, 46(8):738–743, October 1934. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `https://journals.aps.org/pr/abstract/10.1103/PhysRev.46.738`; `https://ui.adsabs.harvard.edu/abs/1934PhRv...46..738H`.

Hartree:1934:RCA

[Har34b] D. R. Hartree. Results of calculations of atomic wave functions. II. — results for K^+ and Cs^+. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 143(850):506–517, February 1, 1934. ISSN 0950-1207 (print), 2053-9150 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1934RSPSA.143..506H`.

Hartree:1935:BSQ

[Har35a] D. R. Hartree. The bearing of statistical and quantum mechanics on school work. *Mathematical Gazette*, 22(233):73–78, May 1935. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL `https://www.jstor.org/stable/3608018`.

Hartree:1935:DA

[Har35b] D. R. Hartree. The differential analyser. *Nature*, 135(3423):940–943, June 8, 1935. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1935Natur.135..940H`; `https://www.nature.com/articles/135940a0`.

Hartree:1935:RCAb

[Har35c] D. R. Hartree. Results of calculations of atomic wave functions. IV. — Results for F^-, Al^{+3}, and Rb^+. *Proceedings of the Royal Society*

of London. Series A, Mathematical and physical sciences, 151(872): 96–105, August 1935. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1935RSPSA.149..210H`.

Hartree:1935:SPA

[Har35d] D. R. Hartree. Some properties and applications of the repeated integrals of the error function. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 80(??):85–102, ???? ??, 1935. CODEN MPMLAQ. ISSN 0076-3721.

Hartree:1936:ADA

[Har36a] D. R. Hartree. The application of the differential analyser to the solution of partial differential equations. In ????, editor, *Reports of the International Congress of Mathematicians, Oslo*, pages 231–?? Gauthier-Villars, Paris, France, 1936.

Hartree:1936:TCA

[Har36b] D. R. Hartree. The theory of complex atoms. *Nature*, 138(3504): 1080–1082, December 26, 1936. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://www.nature.com/articles/1381080a0`.

Hartree:1937:CSE

[Har37a] D. R. Hartree. Calculations on Schubaurer's ellipse. University of Cambridge Library catalog: Four folders of handwritten calculations, c. 1930s: Schubaurer's Ellipse — 0.2 to 0.4, 0.4 to 1.0, 1.0 to 1.8, and 1.8 to 2.0. Loose items: a letter from L. J. Comrie to Hartree, 17 September 1937, discussing a calculation; a letter from Bertha Jeffreys, Lady Jeffreys, to A. E. B. Owen, 5 December 1986, forwarding a letter from Prof. L. Howarth of Bristol, confirming that the papers were likely to be those of Hartree, and citing his publications on these experiments., 1937.

Hartree:1937:NSS

[Har37b] D. R. Hartree. Note on a set of solutions of the equation $jy'' + (2/x)y' - y^2 = 0$. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 81(??): 19–27, ???? ??, 1937. CODEN MPMLAQ. ISSN 0076-3721.

Hartree:1937:EOF

[Har37c] D. R. Hartree. On an equation occurring in Falkner and Skan's approximate treatment of the equations of the boundary layer. *Pro-*

ceedings of the Cambridge Philosophical Society. Mathematical and physical sciences, 33(2):223–239, April 1937. CODEN PCPSA4. ISSN 0008-1981. URL `https://ui.adsabs.harvard.edu/abs/1937PCPS...33..223H`.

Hartree:1938:MID

[Har38] D. R. Hartree. The mechanical integration of differential equations. *Mathematical Gazette*, 22(251):342–364, October 1938. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL `https://www.jstor.org/stable/3607893`. Hartree describes his Meccano model of a differential analyzer in this paper.

Hartree:1939:NIO

[Har39] D. R. Hartree. Note on an integral occurring in the cascade theory of cosmic ray showers. *Memoirs and Proceedings of the Manchester Literary and Philosophical Society (Manchester Memoirs)*, 83(??): 175–182, ???? ??, 1939. CODEN MPMLAQ. ISSN 0076-3721.

Hartree:1940:BDA

[Har40a] D. R. Hartree. The Bush differential analyser and its applications. *Nature*, 146(3697):319–323, September 7, 1940. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1940Natur.146..319H`.

Hartree:1940:GCM

[Har40b] D. R. Hartree. A great calculating machine: the Bush differential analyser and its applications in science and industry. *Proceedings of the Royal Institution of Great Britain*, 31(??):151–194, ???? ??, 1940. CODEN PIGBAI. ISSN 0035-8959. Presented at the Weekly Evening Meeting Royal Institution of Great Britain. Friday, May 17, 1940.

Hartree:1941:NES

[Har41a] D. R. Hartree. On the non-existence of a steady state in a single-anode cylindrical magnetron under certain conditions'. C.V.D.Report Mag. 6, ????, ????, September 1941. URL `https://discovery.nationalarchives.gov.uk/details/r/28633967-3e15-4623-99d1-8247cb198674`. Reference CSAC 68/6/79/D.9.

Hartree:1941:SSC

[Har41b] D. R. Hartree. The steady state of a cylindrical magnetron under conditions of space-charge limitation. C. V. D. Report Mag. 1, ????, ????, April 22, 1941. URL `https:`

//discovery.nationalarchives.gov.uk/details/r/5ee0db12-89f3-4c8a-bb3d-a7b7b38431ec. Reference: CSAC 68/6/79/D.5.

Hartree:1942:CTB

[Har42a] D. R. Hartree. The calculation of the transient behaviour of single-anode cylindrical magnetrons under gradually-applied anode potentials'. C. V. D. Report Mag. 23, ????, ????, November 1942. URL https://discovery.nationalarchives.gov.uk/details/r/97e40eb7-76b7-44fa-89ed-f892f90465c9. Reference CSAC 68/6/79/D.14.

Hartree:1942:MPR

[Har42b] D. R. Hartree. A method of plotting results of calculations of electron orbits in a magnetron, and its application to the determination of the emission, anode current, and charge and potential distribution. C. V. D. Report Mag. 18, ????, ????, July 1942. URL https://discovery.nationalarchives.gov.uk/details/r/9b5ed595-cbd1-41f3-8074-e8a4cb0cab9c. Reference: CSAC 68/6/79/D.13.

Hartree:1943:PRO

[Har43a] D. R. Hartree. Preliminary report on operating conditions for unstrapped magnetrons derived from a criterion for the instability of the single stream steady state. C. V. D. Report Mag. 31, ????, ????, May 1943. URL https://discovery.nationalarchives.gov.uk/details/r/43d39303-3814-423f-a720-e7ef7c7f73fc. Reference CSAC 68/6/79/D.18.

Hartree:1943:TFK

[Har43b] D. R. Hartree. The Thirth-Fourth Kelvin Lecture: Mechanical integration in electrical problems. *Journal of the Institution of Electrical Engineers*, 90(34):435–442, October 1943. CODEN IEJGAB. ISSN 0367-7559 (print), 2054-0582 (electronic). URL https://digital-library.theiet.org/content/journals/10.1049/ji-1.1943.0082. Kelvin lecture to the Institution of Electrical Engineers.

Hartree:1946:ADA

[Har46a] D. R. Hartree. The application of the differential analyser to the evaluation of solutions of partial differential equations. In *Proceedings of the First Canadian Mathematics Congress, Montreal, 1945*, pages 327–337. University of Toronto Press, Toronto, ON, Canada, 1946.

Hartree:1946:CMR

[Har46b] D. R. Hartree. *Calculating Machines. Recent and Prospective Developments and Their Impact on Mathematical Physics*. Cambridge University Press, Cambridge, UK, 1946. 40 + 2 pp.

Hartree:1946:EECa

[Har46c] D. R. Hartree. The ENIAC, an electronic calculating machine. *Nature*, 157(3990):527, April 20, 1946. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1946Natur.157..527H; https://www.nature.com/articles/157527a0`.

Hartree:1946:EECb

[Har46d] D. R. Hartree. The ENIAC, an electronic computing machine. *Nature*, 158(4015):500–506, October 12, 1946. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `https://ui.adsabs.harvard.edu/abs/1946Natur.158..500H`.

Hartree:1946:NGC

[Har46e] D. R. Hartree. The new giant calculating machine. *Listener*, ?? (??):932–??, ???? 1946.

Hartree:1947:MTL

[Har47a] D. R. Hartree. A. M. Turing's lectures on ACE. World-Wide Web document, 1947. URL `http://turing.ecs.soton.ac.uk/browse.php/B/2`.

Hartree:1947:CAS

[Har47b] D. R. Hartree. The calculation of atomic structures. *Reports on Progress in Physics*, 11(1):113–143, January 1947. CODEN RPPHAG. ISSN 0034-4885 (print), 1361-6633 (electronic). Appendix on page 143 has corrections and editions to [Swi35].

Hartree:1947:CCM

[Har47c] D. R. Hartree. Copy of calculating machines. UK National Archives papers, 1947. URL `https://discovery.nationalarchives.gov.uk/details/r/170047ef-454d-41e8-bb56-36ac967c4281`. Hartree's Inaugural address as Plummer Professor of Mathematical Physics, Cambridge. Reference CSAC 45.9.76/14.

Hartree:1947:RPD

[Har47d] D. R. Hartree. Recent and prospective developments in large digital calculating machines. *Journal of the Royal Naval Scientific Service*, ??(??):??, July ??, 1947.

Hartree:1947:RDCa

[Har47e] D. R. Hartree. Recent developments in calculating machines. *Journal of Scientific Instruments*, 24(7):172–176, July 1947. CODEN JSINAY. ISSN 0368-4253, 0950-7671. URL `https://ui.adsabs.harvard.edu/abs/1947JScI...24..172H`.

Hartree:1947:RDCb

[Har47f] D. R. Hartree. Recent developments in calculating machines. *Handel, v.h. XXXe Nederlandisch Natur–en Geneeskundig Congres, Delft*, ??(??):??, ???? ??, 1947.

Hartree:1947:RDCc

[Har47g] D. R. Hartree. Recent developments in calculating machines. *Journal of the Institution of Electrical Engineers, Part 2: Power Engineering*, 95(??):225–226, ???? 1947. CODEN IEJPA4. ISSN 0367-7567 (print), 2054-0590 (electronic). URL `https://momot.rs/d1/y/1692186042/124/i/scimag/2/10.1049/ji-2.1948.0059.pdf~/9nLKhh7cjPnREHZ8ysUdag/recent-developments-in-calculating-machines-7th-of--annas-archive.pdf`.

Hartree:1947:CMR

[Har47h] Douglas R. (Douglas Rayner) Hartree. *Calculating Machines: Recent and Prospective Developments and Their Impact on Mathematical Physics, Inaugural Lecture*. Cambridge University Press, Cambridge, UK, 1947. 40 pp. LCCN QA85 .H25c.

Hartree:1948:EA

[Har48a] D. R. Hartree. Experimental arithmetic. *Eureka*, ??(10):13–??, ???? ??, 1948.

Hartree:1948:HSD

[Har48b] D. R. Hartree. A historical survey of digital computing machines. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 195(1042):265–271, December 22, 1948. CODEN PRLAAZ. ISSN 0080-4630 (print), 2053-9169 (electronic). Section on A discussion on computing machines, with contributions by M. H. A. Newman, Maurice V. Wilkes, F. C. Williams, James H. Wilkinson, and A. D. Booth.

Hartrei:1948:EEC

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HARTREE, D. R. b. 1897, Cambridge, England; d. 1958, Cambridge, England.
1916, U. Cambridge.
1916–19, Military Service.
1919–29, U. Cambridge: 1924–29, Research Fellow; 1926, Ph.D. with R. H. Fowler; 1928–29, Demonstrator.
1928–29, U. Copenhagen.
1929–46, U. Manchester, Prof.
Interviews
One unrecorded interview with Elaine Hartree, D. R. Hartree's widow. 3 pp. notes.
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GOUDSMIT: 5 Mar 24 (60,2).
LINDSAY: 20 Oct 35, 3 letters 1936–39, (66,4).
Unpublished material held elsewhere
BOHR COLLECTION, Copenhagen, Denmark. Letters to Bohr, 21 Mar 28, 3 Apr 28, 29 Jun 28, 21 Dec 28, 24 Mar 29, 2 Apr 30, 26 May 30, 10 Jul 30, 10 Sep 33, 9 Mar 47. See: Bohr.
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Other information
According to Mrs. Hartree, it is unlikely that any extensive collection of her husband's papers exists; he was not in the habit of saving his correspondence.

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org/nobel_prizes/chemistry/laureates/1998/. The authors of this paper rediscover an earlier result [Gás54], and obtain the same value $\alpha = 2/3$, compared to Slater's original $\alpha = 1$ [Sla51b, Sla72].

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