Fundamental Physical Constants --- Complete Listing
2022 CODATA adjustment

From: http://physics.nist.gov/constants

Quantity	Value	Uncertainty	Unit
alpha particle-electron mass ratio	7294.299 541 71	0.000 000 17	
alpha particle mass	6.644 657 3450 e-27	0.000 000 0021	e-27 kg
alpha particle mass energy equivalent	5.971 920 1997 e-10	0.000 000 0019	e-10 J
alpha particle mass energy equivalent in MeV	3727.379 4118	0.000 0012	MeV
alpha particle mass in u	4.001 506 179 129	0.000 000 000 062	u
alpha particle molar mass	4.001 506 1833 e-3	0.000 000 0012	e-3 kg mol^-1
alpha particle-proton mass ratio	3.972 599 690 252	0.000 000 000 070	
alpha particle relative atomic mass	4.001 506 179 129	0.000 000 000 062	
alpha particle rms charge radius	1.6785 e-15	0.0021 e-15	m
Angstrom star	1.000 014 95 e-10	0.000 000 90 e-10	m
atomic mass constant	1.660 539 068 92 e-27	0.000 000 000 52	e-27 kg
atomic mass constant energy equivalent	1.492 418 087 68 e-10	0.000 000 000 46	e-10 J
atomic mass constant energy equivalent in MeV	931.494 103 72	0.000 000 29	MeV
atomic mass unit-electron volt relationship	9.314 941 0372 e8	0.000 000 0029	e8 eV
atomic mass unit-hartree relationship	3.423 177 6922 e7	0.000 000 0011	e7 E_h
atomic mass unit-hertz relationship	2.252 342 721 85 e23	0.000 000 000 70	e23 Hz
atomic mass unit-inverse meter relationship	7.513 006 6209 e14	0.000 000 0023	e14 m^-1
atomic mass unit-joule relationship	1.492 418 087 68 e-10	0.000 000 000 46	e-10 J
atomic mass unit-kelvin relationship	1.080 954 020 67 e13	0.000 000 000 34	e13 K
atomic mass unit-kilogram relationship	1.660 539 068 92 e-27	0.000 000 000 52	e-27 kg
atomic unit of 1st hyperpolarizability	3.206 361 2996 e-53	0.000 000 0015	e-53 C^3 m^3 J^-2
atomic unit of 2nd hyperpolarizability	6.235 379 9735 e-65	0.000 000 0039	e-65 C^4 m^4 J^-3
atomic unit of action	1.054 571 817... e-34	(exact)	J s
atomic unit of charge	1.602 176 634 e-19	(exact)	C
atomic unit of charge density	1.081 202 386 77 e12	0.000 000 000 51	e12 C m^-3
atomic unit of current	6.623 618 237 5082 e-3	0.000 000 000 0072	e-3 A

atomic unit of electric dipole mom.	8.478 353 6198 e-30	0.000 000 0013 e-30 C m
atomic unit of electric field	5.142 206 751 12 e11	0.000 000 000 80 e11 V m^-1
atomic unit of electric field gradient	9.717 362 4424 e21	0.000 000 0030 e21 V m^-2
atomic unit of electric polarizability	1.648 777 272 12 e-41	0.000 000 000 51 e-41 C^2 m^2 J^-1
atomic unit of electric potential	27.211 386 245 981	0.000 000 000 030 V
atomic unit of electric quadrupole mom.	4.486 551 5185 e-40	0.000 000 0014 e-40 C m^2
atomic unit of energy	4.359 744 722 2060 e-18	0.000 000 000 0048 e-18 J
atomic unit of force	8.238 723 5038 e-8	0.000 000 0013 e-8 N
atomic unit of length	5.291 772 105 44 e-11	0.000 000 000 82 e-11 m
atomic unit of mag. dipole mom.	1.854 802 013 15 e-23	0.000 000 000 58 e-23 J T^-1
atomic unit of mag. flux density	2.350 517 570 77 e5	0.000 000 000 73 e5 T
atomic unit of magnetizability	7.891 036 5794 e-29	0.000 000 0049 e-29 J T^-2
atomic unit of mass	9.109 383 7139 e-31	0.000 000 0028 e-31 kg
atomic unit of momentum	1.992 851 915 45 e-24	0.000 000 000 31 e-24 kg m s^-1
atomic unit of permittivity	1.112 650 056 20 e-10	0.000 000 000 17 e-10 F m^-1
atomic unit of time	2.418 884 326 5864 e-17	0.000 000 000 0026 e-17 s
atomic unit of velocity	2.187 691 262 16 e6	0.000 000 000 34 e6 m s^-1
Avogadro constant	6.022 140 76 e23	(exact) mol^-1
Bohr magneton	9.274 010 0657 e-24	0.000 000 0029 e-24 J T^-1
Bohr magneton in eV/T	5.788 381 7982 e-5	0.000 000 0018 e-5 eV T^-1
Bohr magneton in Hz/T	1.399 624 491 71 e10	0.000 000 000 44 e10 Hz T^-1
Bohr magneton in inverse meter per tesla	46.686 447 719	0.000 000 015 m^-1 T^-1
Bohr magneton in K/T	0.671 713 814 72	0.000 000 000 21 K T^-1
Bohr radius	5.291 772 105 44 e-11	0.000 000 000 82 e-11 m
Boltzmann constant	1.380 649 e-23	(exact) J K^-1
Boltzmann constant in eV/K	8.617 333 262... e-5	(exact) eV K^-1
Boltzmann constant in Hz/K	2.083 661 912... e10	(exact) Hz K^-1
Boltzmann constant in inverse meter per kelvin	69.503 480 04...	(exact) m^-1 K^-1
characteristic impedance of vacuum	376.730 313 412	0.000 000 059 ohm
classical electron radius	2.817 940 3205 e-15	0.000 000 0013 e-15 m
Compton wavelength	2.426 310 235 38 e-12	0.000 000 000 76 e-12 m
conductance quantum	7.748 091 729... e-5	(exact) S
conventional value of ampere-90	1.000 000 088 87...	(exact)

A		
conventional value of coulomb-90	1.000 000 088 87...	(exact)
C		
conventional value of farad-90	0.999 999 982 20...	(exact)
F		
conventional value of henry-90	1.000 000 017 79...	(exact)
H		
conventional value of Josephson constant	483 597.9 e9	(exact)
Hz V^-1		
conventional value of ohm-90	1.000 000 017 79...	(exact)
ohm		
conventional value of volt-90	1.000 000 106 66...	(exact)
V		
conventional value of von Klitzing constant	25 812.807	(exact)
ohm		
conventional value of watt-90	1.000 000 195 53...	(exact)
W		
Copper x unit	1.002 076 97 e-13	0.000 000 28 e-
13 m		
deuteron-electron mag. mom. ratio	-4.664 345 550 e-4	0.000 000 012 e-
4		
deuteron-electron mass ratio	3670.482 967 655	0.000 000 063
deuteron g factor	0.857 438 2335	0.000 000 0022
deuteron mag. mom.	4.330 735 087 e-27	0.000 000 011 e-
27 J T^-1		
deuteron mag. mom. to Bohr magneton ratio	4.669 754 568 e-4	0.000 000 012 e-
4		
deuteron mag. mom. to nuclear magneton ratio	0.857 438 2335	0.000 000 0022
deuteron mass	3.343 583 7768 e-27	0.000 000 0010
e-27 kg		
deuteron mass energy equivalent	3.005 063 234 91 e-10	0.000 000 000 94
e-10 J		
deuteron mass energy equivalent in MeV	1875.612 945 00	0.000 000 58
MeV		
deuteron mass in u	2.013 553 212 544	0.000 000 000
015 u		
deuteron molar mass	2.013 553 214 66 e-3	0.000 000 000 63
e-3 kg mol^-1		
deuteron-neutron mag. mom. ratio	-0.448 206 52	0.000 000 11
deuteron-proton mag. mom. ratio	0.307 012 209 30	0.000 000 000 79
deuteron-proton mass ratio	1.999 007 501 2699	0.000 000 000
0084		
deuteron relative atomic mass	2.013 553 212 544	0.000 000 000
015		
deuteron rms charge radius	2.127 78 e-15	0.000 27 e-15
m		
electron charge to mass quotient	-1.758 820 008 38 e11	0.000 000 000 55
e11 C kg^-1		
electron-deuteron mag. mom. ratio	-2143.923 4921	0.000 0056
electron-deuteron mass ratio	2.724 437 107 629 e-4	0.000 000 000
047 e-4		
electron g factor	-2.002 319 304 360 92	0.000 000 000
000 36		
electron gyromag. ratio	1.760 859 627 84 e11	0.000 000 000 55
e11 s^-1 T^-1		
electron gyromag. ratio in MHz/T	28 024.951 3861	0.000 0087
MHz T^-1		
electron-helion mass ratio	1.819 543 074 649 e-4	0.000 000 000
053 e-4		
electron mag. mom.	-9.284 764 6917 e-24	0.000 000 0029
e-24 J T^-1		
electron mag. mom. anomaly	1.159 652 180 46 e-3	0.000 000 000 18
e-3		
electron mag. mom. to Bohr magneton ratio	-1.001 159 652 180 46	0.000 000 000
000 18		

electron mag. mom. to nuclear magneton ratio	-1838.281 971 877	0.000 000 032
electron mass	9.109 383 7139 e-31	0.000 000 0028 e-31 kg
electron mass energy equivalent	8.187 105 7880 e-14	0.000 000 0026 e-14 J
electron mass energy equivalent in MeV	0.510 998 950 69	0.000 000 000 16 MeV
electron mass in u	5.485 799 090 441 e-4	0.000 000 000 097 e-4 u
electron molar mass	5.485 799 0962 e-7	0.000 000 0017 e-7 kg mol^-1
electron-muon mag. mom. ratio	206.766 9881	0.000 0046
electron-muon mass ratio	4.836 331 70 e-3	0.000 000 11 e-3
electron-neutron mag. mom. ratio	960.920 48	0.000 23
electron-neutron mass ratio	5.438 673 4416 e-4	0.000 000 0022 e-4
electron-proton mag. mom. ratio	-658.210 687 89	0.000 000 19
electron-proton mass ratio	5.446 170 214 889 e-4	0.000 000 000 094 e-4
electron relative atomic mass	5.485 799 090 441 e-4	0.000 000 000 097 e-4
electron-tau mass ratio	2.875 85 e-4	0.000 19 e-4
electron to alpha particle mass ratio	1.370 933 554 733 e-4	0.000 000 000 032 e-4
electron to shielded helion mag. mom. ratio	864.058 239 86	0.000 000 70
electron to shielded proton mag. mom. ratio	-658.227 5856	0.000 0027
electron-triton mass ratio	1.819 200 062 327 e-4	0.000 000 000 068 e-4
electron volt	1.602 176 634 e-19	(exact) J
electron volt-atomic mass unit relationship	1.073 544 100 83 e-9	0.000 000 000 33 e-9 u
electron volt-hartree relationship	3.674 932 217 5665 e-2	0.000 000 000 0040 e-2 E_h
electron volt-hertz relationship	2.417 989 242... e14	(exact) Hz
electron volt-inverse meter relationship	8.065 543 937... e5	(exact) m^-1
electron volt-joule relationship	1.602 176 634 e-19	(exact) J
electron volt-kelvin relationship	1.160 451 812... e4	(exact) K
electron volt-kilogram relationship	1.782 661 921... e-36	(exact) kg
elementary charge	1.602 176 634 e-19	(exact) C
elementary charge over h-bar	1.519 267 447... e15	(exact) A J^-1
Faraday constant	96 485.332 12...	(exact) C mol^-1
Fermi coupling constant	1.166 3787 e-5	0.000 0006 e-5 GeV^-2
fine-structure constant	7.297 352 5643 e-3	0.000 000 0011 e-3
first radiation constant	3.741 771 852... e-16	(exact) W m^2
first radiation constant for spectral radiance	1.191 042 972... e-16	(exact) W m^2 sr^-1
hartree-atomic mass unit relationship	2.921 262 317 97 e-8	0.000 000 000 91 e-8 u
hartree-electron volt relationship	27.211 386 245 981	0.000 000 000 030 eV
Hartree energy	4.359 744 722 2060 e-18	0.000 000 000 0048 e-18 J
Hartree energy in eV	27.211 386 245 981	0.000 000 000

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030        eV
hartree-hertz relationship                       6.579 683 920 4999 e15   0.000 000 000
0072 e15   Hz
hartree-inverse meter relationship               2.194 746 313 6314 e7    0.000 000 000
0024 e7    m^-1
hartree-joule relationship                       4.359 744 722 2060 e-18  0.000 000 000
0048 e-18  J
hartree-kelvin relationship                      3.157 750 248 0398 e5    0.000 000 000
0034 e5    K
hartree-kilogram relationship                    4.850 870 209 5419 e-35  0.000 000 000
0053 e-35  kg
helion-electron mass ratio                       5495.885 279 84          0.000 000 16
helion g factor                                  -4.255 250 6995          0.000 000 0034
helion mag. mom.                                 -1.074 617 551 98 e-26   0.000 000 000 93
e-26    J T^-1
helion mag. mom. to Bohr magneton ratio          -1.158 740 980 83 e-3    0.000 000 000 94
e-3
helion mag. mom. to nuclear magneton ratio       -2.127 625 3498          0.000 000 0017
helion mass                                      5.006 412 7862 e-27      0.000 000 0016
e-27      kg
helion mass energy equivalent                    4.499 539 4185 e-10      0.000 000 0014
e-10      J
helion mass energy equivalent in MeV             2808.391 611 12          0.000 000 88
MeV
helion mass in u                                 3.014 932 246 932        0.000 000 000
074        u
helion molar mass                                3.014 932 250 10 e-3     0.000 000 000 94
e-3     kg mol^-1
helion-proton mass ratio                         2.993 152 671 552        0.000 000 000
070
helion relative atomic mass                      3.014 932 246 932        0.000 000 000
074
helion shielding shift                           5.996 7029 e-5           0.000 0023 e-5
hertz-atomic mass unit relationship              4.439 821 6590 e-24      0.000 000 0014
e-24      u
hertz-electron volt relationship                 4.135 667 696... e-15    (exact)
eV
hertz-hartree relationship                       1.519 829 846 0574 e-16  0.000 000 000
0017 e-16  E_h
hertz-inverse meter relationship                 3.335 640 951... e-9     (exact)
m^-1
hertz-joule relationship                         6.626 070 15 e-34        (exact)
J
hertz-kelvin relationship                        4.799 243 073... e-11    (exact)
K
hertz-kilogram relationship                      7.372 497 323... e-51    (exact)
kg
hyperfine transition frequency of Cs-133         9 192 631 770            (exact)
Hz
inverse fine-structure constant                  137.035 999 177          0.000 000 021
inverse meter-atomic mass unit relationship      1.331 025 048 24 e-15    0.000 000 000 41
e-15    u
inverse meter-electron volt relationship         1.239 841 984... e-6     (exact)
eV
inverse meter-hartree relationship               4.556 335 252 9132 e-8   0.000 000 000
0050 e-8   E_h
inverse meter-hertz relationship                 299 792 458              (exact)
Hz
inverse meter-joule relationship                 1.986 445 857... e-25    (exact)
J
inverse meter-kelvin relationship                1.438 776 877... e-2     (exact)
K
inverse meter-kilogram relationship              2.210 219 094... e-42    (exact)
kg
inverse of conductance quantum                   12 906.403 72...         (exact)
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ohm
Josephson constant                                483 597.848 4... e9      (exact)
Hz V^-1
joule-atomic mass unit relationship               6.700 535 2471 e9        0.000 000 0021
e9        u
joule-electron volt relationship                  6.241 509 074... e18     (exact)
eV
joule-hartree relationship                        2.293 712 278 3969 e17   0.000 000 000
0025 e17   E_h
joule-hertz relationship                          1.509 190 179... e33     (exact)
Hz
joule-inverse meter relationship                  5.034 116 567... e24     (exact)
m^-1
joule-kelvin relationship                         7.242 970 516... e22     (exact)
K
joule-kilogram relationship                       1.112 650 056... e-17    (exact)
kg
kelvin-atomic mass unit relationship              9.251 087 2884 e-14      0.000 000 0029
e-14      u
kelvin-electron volt relationship                 8.617 333 262... e-5     (exact)
eV
kelvin-hartree relationship                       3.166 811 563 4564 e-6   0.000 000 000
0035 e-6   E_h
kelvin-hertz relationship                         2.083 661 912... e10     (exact)
Hz
kelvin-inverse meter relationship                 69.503 480 04...         (exact)
m^-1
kelvin-joule relationship                         1.380 649 e-23           (exact)
J
kelvin-kilogram relationship                      1.536 179 187... e-40    (exact)
kg
kilogram-atomic mass unit relationship            6.022 140 7537 e26       0.000 000 0019
e26       u
kilogram-electron volt relationship               5.609 588 603... e35     (exact)
eV
kilogram-hartree relationship                     2.061 485 788 7415 e34   0.000 000 000
0022 e34   E_h
kilogram-hertz relationship                       1.356 392 489... e50     (exact)
Hz
kilogram-inverse meter relationship               4.524 438 335... e41     (exact)
m^-1
kilogram-joule relationship                       8.987 551 787... e16     (exact)
J
kilogram-kelvin relationship                      6.509 657 260... e39     (exact)
K
lattice parameter of silicon                      5.431 020 511 e-10       0.000 000 089 e-
10       m
lattice spacing of ideal Si (220)                 1.920 155 716 e-10       0.000 000 032 e-
10       m
Loschmidt constant (273.15 K, 100 kPa)            2.651 645 804... e25     (exact)
m^-3
Loschmidt constant (273.15 K, 101.325 kPa)        2.686 780 111... e25     (exact)
m^-3
luminous efficacy                                 683                      (exact)
lm W^-1
mag. flux quantum                                 2.067 833 848... e-15    (exact)
Wb
molar gas constant                                8.314 462 618...         (exact)
J mol^-1 K^-1
molar mass constant                               1.000 000 001 05 e-3     0.000 000 000 31
e-3     kg mol^-1
molar mass of carbon-12                           12.000 000 0126 e-3      0.000 000 0037
e-3       kg mol^-1
molar Planck constant                             3.990 312 712... e-10    (exact)
J Hz^-1 mol^-1
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molar volume of ideal gas (273.15 K, 100 kPa)	22.710 954 64... e-3	(exact)
m^3 mol^-1		
molar volume of ideal gas (273.15 K, 101.325 kPa)	22.413 969 54... e-3	(exact)
m^3 mol^-1		
molar volume of silicon	1.205 883 199 e-5	0.000 000 060 e-
5 m^3 mol^-1		
Molybdenum x unit	1.002 099 52 e-13	0.000 000 53 e-
13 m		
muon Compton wavelength	1.173 444 110 e-14	0.000 000 026 e-
14 m		
muon-electron mass ratio	206.768 2827	0.000 0046
muon g factor	-2.002 331 841 23	0.000 000 000 82
muon mag. mom.	-4.490 448 30 e-26	0.000 000 10 e-
26 J T^-1		
muon mag. mom. anomaly	1.165 920 62 e-3	0.000 000 41 e-3
muon mag. mom. to Bohr magneton ratio	-4.841 970 48 e-3	0.000 000 11 e-3
muon mag. mom. to nuclear magneton ratio	-8.890 597 04	0.000 000 20
muon mass	1.883 531 627 e-28	0.000 000 042 e-
28 kg		
muon mass energy equivalent	1.692 833 804 e-11	0.000 000 038 e-
11 J		
muon mass energy equivalent in MeV	105.658 3755	0.000 0023
MeV		
muon mass in u	0.113 428 9257	0.000 000 0025
u		
muon molar mass	1.134 289 258 e-4	0.000 000 025 e-
4 kg mol^-1		
muon-neutron mass ratio	0.112 454 5168	0.000 000 0025
muon-proton mag. mom. ratio	-3.183 345 146	0.000 000 071
muon-proton mass ratio	0.112 609 5262	0.000 000 0025
muon-tau mass ratio	5.946 35 e-2	0.000 40 e-2
natural unit of action	1.054 571 817... e-34	(exact)
J s		
natural unit of action in eV s	6.582 119 569... e-16	(exact)
eV s		
natural unit of energy	8.187 105 7880 e-14	0.000 000 0026
e-14 J		
natural unit of energy in MeV	0.510 998 950 69	0.000 000 000 16
MeV		
natural unit of length	3.861 592 6744 e-13	0.000 000 0012
e-13 m		
natural unit of mass	9.109 383 7139 e-31	0.000 000 0028
e-31 kg		
natural unit of momentum	2.730 924 534 46 e-22	0.000 000 000 85
e-22 kg m s^-1		
natural unit of momentum in MeV/c	0.510 998 950 69	0.000 000 000 16
MeV/c		
natural unit of time	1.288 088 666 44 e-21	0.000 000 000 40
e-21 s		
natural unit of velocity	299 792 458	(exact)
m s^-1		
neutron Compton wavelength	1.319 590 903 82 e-15	0.000 000 000 67
e-15 m		
neutron-electron mag. mom. ratio	1.040 668 84 e-3	0.000 000 24 e-3
neutron-electron mass ratio	1838.683 662 00	0.000 000 74
neutron g factor	-3.826 085 52	0.000 000 90
neutron gyromag. ratio	1.832 471 74 e8	0.000 000 43 e8
s^-1 T^-1		
neutron gyromag. ratio in MHz/T	29.164 6935	0.000 0069
MHz T^-1		
neutron mag. mom.	-9.662 3653 e-27	0.000 0023 e-27
J T^-1		
neutron mag. mom. to Bohr magneton ratio	-1.041 875 65 e-3	0.000 000 25 e-3
neutron mag. mom. to nuclear magneton ratio	-1.913 042 76	0.000 000 45
neutron mass	1.674 927 500 56 e-27	0.000 000 000 85

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e-27    kg
neutron mass energy equivalent                          1.505 349 765 14 e-10    0.000 000 000 76
e-10    J
neutron mass energy equivalent in MeV                   939.565 421 94           0.000 000 48
MeV
neutron mass in u                                       1.008 664 916 06         0.000 000 000 40
u
neutron molar mass                                      1.008 664 917 12 e-3     0.000 000 000 51
e-3     kg mol^-1
neutron-muon mass ratio                                 8.892 484 08             0.000 000 20
neutron-proton mag. mom. ratio                          -0.684 979 35            0.000 000 16
neutron-proton mass difference                          2.305 574 61 e-30        0.000 000 67 e-
30        kg
neutron-proton mass difference energy equivalent        2.072 147 12 e-13        0.000 000 60 e-
13        J
neutron-proton mass difference energy equivalent in MeV 1.293 332 51             0.000 000 38
MeV
neutron-proton mass difference in u                     1.388 449 48 e-3         0.000 000 40 e-3
u
neutron-proton mass ratio                               1.001 378 419 46         0.000 000 000 40
neutron relative atomic mass                            1.008 664 916 06         0.000 000 000 40
neutron-tau mass ratio                                  0.528 779                0.000 036
neutron to shielded proton mag. mom. ratio              -0.684 996 94            0.000 000 16
Newtonian constant of gravitation                       6.674 30 e-11            0.000 15 e-11
m^3 kg^-1 s^-2
Newtonian constant of gravitation over h-bar c          6.708 83 e-39            0.000 15 e-39
(GeV/c^2)^-2
nuclear magneton                                        5.050 783 7393 e-27      0.000 000 0016
e-27      J T^-1
nuclear magneton in eV/T                                3.152 451 254 17 e-8     0.000 000 000 98
e-8     eV T^-1
nuclear magneton in inverse meter per tesla             2.542 623 410 09 e-2     0.000 000 000 79
e-2     m^-1 T^-1
nuclear magneton in K/T                                 3.658 267 7706 e-4       0.000 000 0011
e-4       K T^-1
nuclear magneton in MHz/T                               7.622 593 2188           0.000 000 0024
MHz T^-1
Planck constant                                         6.626 070 15 e-34        (exact)
J Hz^-1
Planck constant in eV/Hz                                4.135 667 696... e-15    (exact)
eV Hz^-1
Planck length                                           1.616 255 e-35           0.000 018 e-35
m
Planck mass                                             2.176 434 e-8            0.000 024 e-8
kg
Planck mass energy equivalent in GeV                    1.220 890 e19            0.000 014 e19
GeV
Planck temperature                                      1.416 784 e32            0.000 016 e32
K
Planck time                                             5.391 247 e-44           0.000 060 e-44
s
proton charge to mass quotient                          9.578 833 1430 e7        0.000 000 0030
e7        C kg^-1
proton Compton wavelength                               1.321 409 853 60 e-15    0.000 000 000 41
e-15    m
proton-electron mass ratio                              1836.152 673 426         0.000 000 032
proton g factor                                         5.585 694 6893           0.000 000 0016
proton gyromag. ratio                                   2.675 221 8708 e8        0.000 000 0011
e8        s^-1 T^-1
proton gyromag. ratio in MHz/T                          42.577 478 461           0.000 000 018
MHz T^-1
proton mag. mom.                                        1.410 606 795 45 e-26    0.000 000 000 60
e-26    J T^-1
proton mag. mom. to Bohr magneton ratio                 1.521 032 202 30 e-3     0.000 000 000 45
e-3
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proton mag. mom. to nuclear magneton ratio	2.792 847 344 63	0.000 000 000 82
proton mag. shielding correction	2.567 15 e-5	0.000 41 e-5
proton mass	1.672 621 925 95 e-27	0.000 000 000 52 e-27 kg
proton mass energy equivalent	1.503 277 618 02 e-10	0.000 000 000 47 e-10 J
proton mass energy equivalent in MeV	938.272 089 43	0.000 000 29 MeV
proton mass in u	1.007 276 466 5789	0.000 000 000 0083 u
proton molar mass	1.007 276 467 64 e-3	0.000 000 000 31 e-3 kg mol^-1
proton-muon mass ratio	8.880 243 38	0.000 000 20
proton-neutron mag. mom. ratio	-1.459 898 02	0.000 000 34
proton-neutron mass ratio	0.998 623 477 97	0.000 000 000 40
proton relative atomic mass	1.007 276 466 5789	0.000 000 000 0083
proton rms charge radius	8.4075 e-16	0.0064 e-16 m
proton-tau mass ratio	0.528 051	0.000 036
quantum of circulation	3.636 947 5467 e-4	0.000 000 0011 e-4 m^2 s^-1
quantum of circulation times 2	7.273 895 0934 e-4	0.000 000 0023 e-4 m^2 s^-1
reduced Compton wavelength	3.861 592 6744 e-13	0.000 000 0012 e-13 m
reduced muon Compton wavelength	1.867 594 306 e-15	0.000 000 042 e-15 m
reduced neutron Compton wavelength	2.100 194 1520 e-16	0.000 000 0011 e-16 m
reduced Planck constant	1.054 571 817... e-34	(exact) J s
reduced Planck constant in eV s	6.582 119 569... e-16	(exact) eV s
reduced Planck constant times c in MeV fm	197.326 980 4...	(exact) MeV fm
reduced proton Compton wavelength	2.103 089 100 51 e-16	0.000 000 000 66 e-16 m
reduced tau Compton wavelength	1.110 538 e-16	0.000 075 e-16 m
Rydberg constant	10 973 731.568 157	0.000 012 m^-1
Rydberg constant times c in Hz	3.289 841 960 2500 e15	0.000 000 000 0036 e15 Hz
Rydberg constant times hc in eV	13.605 693 122 990	0.000 000 000 015 eV
Rydberg constant times hc in J	2.179 872 361 1030 e-18	0.000 000 000 0024 e-18 J
Sackur-Tetrode constant (1 K, 100 kPa)	-1.151 707 534 96	0.000 000 000 47
Sackur-Tetrode constant (1 K, 101.325 kPa)	-1.164 870 521 49	0.000 000 000 47
second radiation constant	1.438 776 877... e-2	(exact) m K
shielded helion gyromag. ratio	2.037 894 6078 e8	0.000 000 0018 e8 s^-1 T^-1
shielded helion gyromag. ratio in MHz/T	32.434 100 033	0.000 000 028 MHz T^-1
shielded helion mag. mom.	-1.074 553 110 35 e-26	0.000 000 000 93 e-26 J T^-1
shielded helion mag. mom. to Bohr magneton ratio	-1.158 671 494 57 e-3	0.000 000 000 94 e-3
shielded helion mag. mom. to nuclear magneton ratio	-2.127 497 7624	0.000 000 0017
shielded helion to proton mag. mom. ratio	-0.761 766 577 21	0.000 000 000 66
shielded helion to shielded proton mag. mom. ratio	-0.761 786 1334	0.000 000 0031
shielded proton gyromag. ratio	2.675 153 194 e8	0.000 000 011 e8 s^-1 T^-1

shielded proton gyromag. ratio in MHz/T	42.576 385 43	0.000 000 17
MHz T^-1		
shielded proton mag. mom.	1.410 570 5830 e-26	0.000 000 0058
e-26 J T^-1		
shielded proton mag. mom. to Bohr magneton ratio	1.520 993 1551 e-3	0.000 000 0062
e-3		
shielded proton mag. mom. to nuclear magneton ratio	2.792 775 648	0.000 000 011
shielding difference of d and p in HD	1.987 70 e-8	0.000 10 e-8
shielding difference of t and p in HT	2.394 50 e-8	0.000 20 e-8
speed of light in vacuum	299 792 458	(exact)
m s^-1		
standard acceleration of gravity	9.806 65	(exact)
m s^-2		
standard atmosphere	101 325	(exact)
Pa		
standard-state pressure	100 000	(exact)
Pa		
Stefan-Boltzmann constant	5.670 374 419... e-8	(exact)
W m^-2 K^-4		
tau Compton wavelength	6.977 71 e-16	0.000 47 e-16
m		
tau-electron mass ratio	3477.23	0.23
tau energy equivalent	1776.86	0.12
MeV		
tau mass	3.167 54 e-27	0.000 21 e-27
kg		
tau mass energy equivalent	2.846 84 e-10	0.000 19 e-10
J		
tau mass in u	1.907 54	0.000 13
u		
tau molar mass	1.907 54 e-3	0.000 13 e-3
kg mol^-1		
tau-muon mass ratio	16.8170	0.0011
tau-neutron mass ratio	1.891 15	0.000 13
tau-proton mass ratio	1.893 76	0.000 13
Thomson cross section	6.652 458 7051 e-29	0.000 000 0062
e-29 m^2		
triton-electron mass ratio	5496.921 535 51	0.000 000 21
triton g factor	5.957 924 930	0.000 000 012
triton mag. mom.	1.504 609 5178 e-26	0.000 000 0030
e-26 J T^-1		
triton mag. mom. to Bohr magneton ratio	1.622 393 6648 e-3	0.000 000 0032
e-3		
triton mag. mom. to nuclear magneton ratio	2.978 962 4650	0.000 000 0059
triton mass	5.007 356 7512 e-27	0.000 000 0016
e-27 kg		
triton mass energy equivalent	4.500 387 8119 e-10	0.000 000 0014
e-10 J		
triton mass energy equivalent in MeV	2808.921 136 68	0.000 000 88
MeV		
triton mass in u	3.015 500 715 97	0.000 000 000 10
u		
triton molar mass	3.015 500 719 13 e-3	0.000 000 000 94
e-3 kg mol^-1		
triton-proton mass ratio	2.993 717 034 03	0.000 000 000 10
triton relative atomic mass	3.015 500 715 97	0.000 000 000 10
triton to proton mag. mom. ratio	1.066 639 9189	0.000 000 0021
unified atomic mass unit	1.660 539 068 92 e-27	0.000 000 000 52
e-27 kg		
vacuum electric permittivity	8.854 187 8188 e-12	0.000 000 0014
e-12 F m^-1		
vacuum mag. permeability	1.256 637 061 27 e-6	0.000 000 000 20
e-6 N A^-2		
von Klitzing constant	25 812.807 45...	(exact)
ohm		

weak mixing angle	0.223 05	0.000 23
Wien frequency displacement law constant Hz K^-1	5.878 925 757... e10	(exact)
Wien wavelength displacement law constant m K	2.897 771 955... e-3	(exact)
W to Z mass ratio	0.881 45	0.000 13