PHYSICAL AND ASTRONOMICAL CONSTANTS

c	Speed of light in vacuum	2.998×10^8 m s^{-1}
e	Elementary charge	1.602×10^{-19} C
m_n	Neutron rest mass	1.675×10^{-27} kg
m_p	Proton rest mass	1.6725×10^{-27} kg
m_e	Electron rest mass	9.110×10^{-31} kg
m_{He}	Helium-4 rest mass	6.644×10^{-27} kg
h	Planck's constant	6.626×10^{-34} J s
H_0	Hubble's constant	70 (km/s)/Mpc
k_B	Boltzmann's constant	1.381×10^{-23} J K^{-1}
b	Wien's constant	2.898×10^{-3} m K
G	Gravitational constant	6.673×10^{-11} N m^2 kg^{-2}
σ	Stefan-Boltzmann constant	5.670×10^{-8} J m^{-2} K^{-4} s^{-1}
c_1	First Radiation Constant $(= 2\pi h c^2)$	3.742×10^{-16} J m^2 s^{-1}
c_2	Second Radiation Constant $(= hc/k)$	1.439×10^{-2} m K
N_A	Avogadro constant	6.022×10^{23} mol^{-1}
R	Gas constant	8.314 J K^{-1} mol^{-1}
a_0	Bohr radius	5.292×10^{-11} m
μ_B	Bohr magneton	9.274×10^{-24} J T^{-1}
$M_\odot$	Solar mass	1.989×10^{30} kg
$R_\odot$	Solar radius	6.96×10^8 m
$L_\odot$	Solar luminosity	3.827×10^{26} J s^{-1}
$T_\odot$	Solar temperature	5770 K
$M_\oplus$	Earth mass	5.976×10^{24} kg
$R_\oplus$	Mean Earth radius	6.371×10^6 m
$I_\oplus$	Earth moment of Inertia	8.04×10^{37} kg m^2
$R_\mathbb{C}$	Mean Moon radius	1.737×10^6 m
$M_{\jupiter}$	Mean Jupiter mass	1.9×10^{27} kg
$R_{\jupiter}$	Mean Jupiter radius	7.1492×10^7 m
$a_{\jupiter}$	Mean orbital radius of Jupiter	5.2 AU
$a_\mathbb{C}$	Mean semimajor axis Moon orbit	3.84399×10^8 m
1 light year		9.461×10^{15} m
1 AU	Astronomical Unit	1.496×10^{11} m
1 pc	Parsec	3.086×10^{16} m
1 year		3.156×10^7 s
1 sidereal day		86164 s
1 erg		1×10^{-7} J
1 bar		10^5 N m^{-2}

ENERGY CONVERSION : 1 joule (J) = 6.2415×10^{18} electronvolts (eV)