fundamental physical constants

a	radiation density constant	7.55×10^{-16} J m^{-3} K^{-4}
c	velocity of light	3.00×10^{8} m s^{-1}
G	gravitational constant	6.67×10^{-11} N m^{2} kg^{-2}
h	Planck's constant	6.62×10^{-34} J s
k	Boltzmann's constant	1.38×10^{-23} J K^{-1}
m_e	mass of electron	9.11×10^{-31} kg
m_H	mass of hydrogen atom	1.67×10^{-27} kg
N_A	Avogadro's number	6.02×10^{23} mol^{-1}
σ	Stefan Boltzmann constant	5.67×10^{-8} W m^{-2} K^{-4}
R	gas constant (k/m_H)	8.26×10^{3} J K^{-1} kg^{-1}
e	charge of electron	1.60×10^{-19} C

astronomical quantities

$L_\odot$	luminosity of Sun	3.86×10^{26} W
$M_\odot$	mass of Sun	1.99×10^{30} kg
$r_\odot$	radius of Sun	6.96×10^{8} m

$T_{e\odot}$	effective temperature of Sun	5780 K
parsec	(unit of distance)	3.09×10^{16} m

symbols

a	acceleration
A, Z, N	nuclear mass number, charge number, neutron number
B	magnetic induction
B_ν	Planck function
c_p, c_v	specific heat at constant pressure, constant volume
d, d_*	distance, stellar
d	deuteron
e^-, e^+	electron, positron
E	energy
f	velocity distribution function
$f(M)$	initial mass function
F_{cond}, F_{rad}	conductive, radiative flux
g	acceleration due to gravity
h	angular momentum per unit mass
H_p	pressure scale height
i	inclination of orbit

I_ν	intensity of radiation
j_ν	emission coefficient
l	apparent luminosity, mixing length, mean free path
L, L_s, L_{rad}, L_{conv}, L_{cond}	luminosity, total, radiative, convective, conductive
m	apparent magnitude, fractional mass, particle mass
M, M_V, M_{bol}	absolute magnitude, visual, bolometric
M, M_s, M_{crit}, M_{cc}, M_{ce}	mass, total, critical, convective core, convective envelope
n	number density
n_f	number of degrees of freedom
n	neutron
O, B, A, F, G, K, M	spectral types of stars
p	momentum
p	proton
P, P_c, P_s, P_{gas}, P_{rad}	pressure, central, surface, gas, radiation
P	period of orbit
q	charge on nucleus
Q	binding energy of nucleus
r, r_s	radius, total
R	Rayleigh number
R_{Sch}	Schwarzschild radius
t, t_d, t_{th}, t_n	time, dynamical, thermal, nuclear
T, T_e, T_c, T_{av}	temperature, effective, central, mean
u	thermal energy per unit mass
U	total thermal energy

UBV	stellar magnitudes
v, v_{esc}, v_{av}	velocity, escape, mean
v	volume per unit mass
V	volume, potential energy
x	position
X, Y, Z	mass fraction of hydrogen, helium, heavy elements
α	helium 4 nucleus (alpha particle)
γ	ratio of specific heats
γ	photon
∇, ∇_{ad}	$P\mathrm{d}T/T\mathrm{d}p$, adiabatic value
ε, ε_{pp}, ε_{CN}, ε_{3He}	energy release, proton-proton, carbon-nitrogen, helium
η, α , β	exponents in laws of energy release and opacity
κ, κ_s, κ_{rad}, κ_{cond}	opacity, surface, radiative, conductive
κ_ν	absorption coefficient
λ	wavelength
λ_{cond}, λ_{rad}	thermal conductivity, radiative
μ	mean molecular weight
ν	frequency
ν_e, ν_{anti}	neutrino, antineutrino
ρ, ρ_c, ρ_{av}	density, central, mean
σ_ν	scattering coefficient
Σ	surface density of disk
Φ	Roche potential
ω	angular velocity
ω_p	plasma frequency
Ω	

gravitational potential energy

The subscript $\odot$ refers to solar values.