

APPENDIX 1. Constants, Units and Conversion Factors

The cgs unit system is most often used in the astrophysical literature. Some astronomical constants and conversion factors are listed below.

Solar Mass	M_{\odot}	1.989×10^{33}	gr
Jupiter Mass	M_J	1.899×10^{30}	gr
Earth Mass	M_{\oplus}	5.974×10^{27}	gr
Moon Mass		7.349×10^{25}	gr
Solar Luminosity	L_{\odot}	3.85×10^{33}	erg s ⁻¹
Solar Radius	R_{\odot}	6.963×10^{10}	cm
Earth Radius	R_{\oplus}	6.378×10^8	cm
Astronomical Unit	AU	1.496×10^{13}	cm
Light Year	ly	9.461×10^{17}	cm
Parsec	pc	3.086×10^{18}	cm
		3.26	ly
Jansky	Jy	10^{-23}	erg s ⁻¹ cm ⁻² Hz ⁻¹
Stefan Boltzmann constant	σ	5.67051×10^{-5}	erg s ⁻¹ cm ⁻² K ⁻⁴
Boltzmann constant	k	1.38066×10^{-16}	erg K ⁻¹
Planck constant	h	6.62607×10^{-27}	erg s
Electron volt	eV	1.60218×10^{-12}	erg
		8065.54	cm ⁻¹
		11604.45	K
Atomic mass unit	amu	1.66054×10^{-24}	gr
Proton mass	m_p	1.67262×10^{-24}	gr
Electron mass	m_e	9.10939×10^{-28}	gr
Electron charge	e	4.80321×10^{-10}	esu
Speed of Light	c	2.99792×10^{10}	cm s ⁻¹
Atomic unit	au or a_0	5.29177×10^{-9}	cm
Debye	D	10^{-18}	esu cm
Hartree	H	4.360×10^{-11}	erg
Avogadro constant	N_A	6.02214×10^{23}	mol ⁻¹
Kcal/mol		6.947×10^{-14}	erg atom ⁻¹