Astro 402 Spring 2005
Physical and Astronomical Constants

$c = 2.99792 \times 10^{10}$ cm s^{-1}

$G = 6.673 \times 10^{-8}$ dyne cm^2 gm^{-2}

$h = 6.626 \times 10^{-27}$ erg s

$e = 4.803 \times 10^{-10}$ esu

$m_e = 9.109 \times 10^{-28}$ gm

$m_p = 1.67 \times 10^{-24}$ gm

$k = 1.3806 \times 10^{-16}$erg K^{-1}

$\sigma = 5.67 \times 10^{-5}$ erg cm^{-2} K^{-4} s^{-1}

1 eV $= 1.602 \times 10^{-12}$ erg

1 A.U. $= 1.496 \times 10^{13}$ cm

1 pc $= 3.086 \times 10^{18}$ cm

1 $M_\odot = 1.989 \times 10^{33}$ gm

1 $R_\odot = 6.96 \times 10^{10}$ cm

1 $L_\odot = 3.826 \times 10^{33}$ erg s^{-1}

1Jy $= 10^{-23}$ erg s^{-1} cm^{-2} Hz^{-1}