

Wien displacement law constant = 0.290 cm K $N_A = 6.022 \times 10^{23} \text{ mole}^{-1}$

$\sigma =$ Stefan-Boltzmann constant = $5.67 \times 10^{-8} \text{ W}/(\text{m}^2 \text{ K}^4)$

1 parsec = 3.262 light years

1 light year = $9.46 \times 10^{15} \text{ m}$ 1 year = 3.16×10^7 seconds

gravitational constant = $6.67 \times 10^{-11} \text{ N m}^2/\text{kg}^2$ solar mass $M_\odot = 1.99 \times 10^{30} \text{ kg}$

Boltzmann constant = $1.38 \times 10^{-23} \text{ J/K}$ Coulomb law constant = $8.99 \times 10^9 \text{ N m}^2/\text{C}^2$

$h =$ Planck constant = $6.63 \times 10^{-34} \text{ J s}$ $\hbar = h/2\pi$ $e = 1.60 \times 10^{-19} \text{ Coulomb}$

mass of electron = $9.11 \times 10^{-31} \text{ kg}$

mass of neutron = $1.6749 \times 10^{-27} \text{ kg}$ mass of proton = $1.6726 \times 10^{-27} \text{ kg}$

1 eV = $1.60 \times 10^{-19} \text{ Joule}$ 1 MeV = 10^6 eV $c =$ speed of light = $3.00 \times 10^8 \text{ m/s}$

1 nm = 10^{-9} m 1 Å = 10^{-10} m 1 fermi = 10^{-5} Å