

CONSTANTES FISICAS

$$1 \text{ eV} = 1,6 \times 10^{-19} \text{ Joule}$$

$$m_p = 1,673 \times 10^{-27} \text{ kg} = 938 \frac{\text{MeV}}{c^2}$$

$$1 \text{ nm} = 10^{-9} \text{ m}$$

$$\hbar = 1,055 \times 10^{-34} \text{ J} \cdot \text{s}$$

$$N_A = \# \text{ de Avogadro} \\ = 6,022 \times 10^{23} \text{ mole}^{-1}$$

$$\frac{h}{m_e c} = 2,426 \times 10^{-12} \text{ m}$$

$$R_\infty \equiv \text{Constante de Rydberg} \\ = 1,097 \times 10^7 \text{ m}^{-1}$$

$$\hbar c = 197,3 \text{ eV} \cdot \text{nm}$$

$$G = 6,67 \times 10^{-11} \text{ MKS}$$

$$\lambda_{max} \cdot T = 2,898 \times 10^{-3} [\text{K} \cdot \text{m}]$$

$$\sigma = 5,676 \times 10^{-8} \text{ W}/[\text{m}^2 \cdot \text{K}^4]$$

$$R_\odot \equiv \text{Radio del Sol} \sim 7 \times 10^8 \text{ m}$$

$$M_\odot \equiv \text{Masa del Sol} \sim 1,99 \times 10^{33} \text{ gr}$$

$$m_e = 9,1 \times 10^{-31} \text{ kg} = 0,511 \frac{\text{MeV}}{c^2}$$

$$m_n = 1,675 \times 10^{-27} \text{ kg} = 939 \frac{\text{MeV}}{c^2}$$

$$h = 6,626 \times 10^{-34} \text{ J} \cdot \text{s} = 4,136 \times 10^{-15} \text{ eV} \cdot \text{s}$$

$$\hbar = 1,055 \times 10^{-27} \text{ ergs} \cdot \text{s}$$

$$k_B \equiv \text{Constante de Boltzmann} \\ = 1,4 \times 10^{-23} \text{ J}/\text{K} = 8,62 \times 10^{-5} \frac{\text{eV}}{\text{K}}$$

$$a_0 \equiv \text{Radio de Bohr} = 5,292 \times 10^{-11} \text{ m}$$

$$\frac{e^2}{\hbar c} \equiv \text{Constante de estructura fina} = 1/137$$

$$\frac{1}{4\pi\epsilon_0} = 8,988 \times 10^9 \frac{\text{N} \cdot \text{m}^2}{\text{C}^2}$$

$$\frac{e^2}{4\pi\epsilon_0} = 1,440 \text{ eV} \cdot \text{nm}$$

$$L_\odot \equiv \text{Luminosidad del Sol} \sim 3,2 \times 10^{33} \text{ ergs}/\text{s}$$

$$\sigma \equiv \text{Constante de Stefan-Boltzmann}$$

$$1 \text{ AU} \equiv \text{Distancia Sol-Tierra} \simeq 1,5 \times 10^{13} \text{ cm}$$

$$M_\oplus \equiv \text{Masa de la Tierra} \sim 5,97 \times 10^{27} \text{ gr}$$