

Units

We shall consider gravitational units $G = c = 1$ to make computations somewhat simpler. Note the respective values as below:

$$1 = c = 2.9979 \times 10^{10} \text{ cm/s},$$

$$1 = G = 6.6720 \times 10^{-8} \text{ cm}^3 \text{ g}^{-1} \text{ s}^{-2}$$

$$= 6.674 \times 10^{-11} \text{ N m}^2 \text{ kg}^{-2},$$

$$1 \text{ dyne/cm}^2 = 8.2601 \times 10^{-40} \text{ km}^{-2},$$

$$1 \text{ gm/cm}^3 = 7.4237 \times 10^{-19} \text{ km}^{-2}.$$

$$1 \text{ MeV} = 1.6022 \times 10^{-6} \text{ erg} = 1.3234 \times 10^{-55} \text{ cm}$$

$$= 1.7827 \times 10^{-27} \text{ g} = 1.1604 \times 10^{10} \text{ K},$$

$$1 \text{ fm} = 10^{-13} \text{ cm},$$

$$\text{MeV/fm}^3 = 1.7827 \times 10^{12} \text{ g/cm}^3$$

$$= 1.6022 \times 10^{33} \text{ dyne/cm}^2$$

$$= 1.3234 \times 10^{-6} \text{ km}^{-2},$$

$$M_{\odot} = 1.4766 \text{ km} = 1.989 \times 10^{33} \text{ g}$$

$$= 1.116 \times 10^{60} \text{ MeV}.$$

$$Q(km) = \left(Q \times 1000 \times \frac{c^2}{\sqrt{\frac{G}{4\pi\epsilon_0}}} \right) C.$$