$$\vec{F} = -\frac{GMm}{r^2}\,\hat{r}$$

$$\rho(r) = \rho_0\left(1 + \frac{r^2}{b^2}\right)^{-5/2}$$

$$\vec{F} = -\frac{G\,M_{\rm int}\,m}{r^2}\,\hat{r}$$

$$\nabla^2\Phi = 4\pi G\rho$$

$$\frac{100,000 \text{ parsecs}}{1000} = 100 \text{ parsecs}$$