

Amal
číslo zastaralá
Kučelá

7. Červen - 1936

$$\rho = \frac{M}{V} = \frac{M_0 \cdot e^{xt}}{V} = \frac{M_0}{V} e^{\frac{9B}{M_0} t} \quad // \quad V = \frac{1}{2} \sqrt{2} a^3 = 0,707 a^3$$

$$\rho = \frac{2M_0}{\sqrt{2} a^3} \exp\left(\frac{9B}{M_0} t\right)$$



18. Červenec - 1936

$$T = \frac{\pi}{2} \left(\frac{3}{8\pi G \rho} \right)^{1/2}$$

G = Newtonova gravitační
konstanta

$$T = \frac{\pi}{2} \left(\frac{3}{8\pi G \frac{2M_0}{\sqrt{2} a^3} \exp\left(\frac{9B}{M_0} t\right)} \right)^{1/2} =$$

$$= \frac{\pi}{2} \left[\frac{3\sqrt{2} a^3}{16\pi G M_0} \exp\left(\frac{-9B}{M_0} t\right) \right]^{1/2} =$$

$$= \frac{\pi}{2} \left[\frac{3\sqrt{2} a^3}{16\pi G M_0} \right]^{1/2} \exp\left(\frac{-9B}{2M_0} t\right) =$$

$$= \frac{1}{8} \left[\frac{3\pi\sqrt{2}}{G} \right]^{1/2} \left[\frac{a^3}{M_0} \right]^{1/2} \exp\left(\frac{-9B}{2M_0} t\right) =$$

$$= 0,125 \cdot 447 \cdot 10^4 \left[\frac{a^3}{M_0} \right]^{1/2} \exp\left(\frac{-9B}{2M_0} t\right) =$$

$$= 5,59 \cdot 10^4 \left[\frac{a^3}{M_0} \right]^{1/2} \exp\left(\frac{-9B}{2M_0} t\right) \text{ s.}$$