

217(3) : Inter-relationship between Constants.

The constants are:

$$d = \frac{L^2}{m^2 m G} \quad - (1)$$

for $x \sim 1,$ $- (2)$

$$r_0 = \frac{2mG}{c^2}, \quad - (3)$$

$$a = \frac{L}{mc}, \quad b = \frac{Lc}{E}, \quad - (4)$$

$$E = \left(1 + \frac{2EL^2}{m^3 m^2 G^2} \right)^{1/2} \quad - (5)$$

Conical Section

$$\cos(x\theta) = \frac{1}{E} \left(\frac{d}{r} - 1 \right) \quad - (6)$$

$$\theta = \frac{1}{x} \cos^{-1} \left(\frac{1}{E} \left(\frac{d}{r} - 1 \right) \right) \quad - (7)$$

EGR

$$\theta = \frac{1}{x} \cos^{-1} \left[\left[1 - \left(\frac{d}{x E} \right)^2 \left(\frac{1}{b^2} - \left(1 - \frac{r_0}{r} \right) \left(\frac{1}{a^2} + \frac{1}{r^2} \right) \right) \right]^{1/2} \right]$$