

DEFINITIVE PROOF NINE

THE SOLAR SYSTEM ORBIT IN GENERAL RELATIVITY IS NOT A PRECESSING ELLIPSE

The orbital equation is:

$$\left(\frac{dr}{d\theta}\right)^2 = r^4 \left(\frac{1}{b^2} - m(r) \left(\frac{1}{a^2} + \frac{1}{r^2} \right) \right) \quad - (1)$$

where: $a = \frac{L}{mc}$, $b = \frac{Lc}{E}$, $- (2)$

$$m(r) = \frac{E}{mc^2} \left(1 + \frac{E}{mc^2} \right)^{-1}. \quad - (3)$$

It follows that:

$$\left(\frac{dr}{d\theta}\right)^2 = Ar^2(r^2 - B) \quad - (4)$$

where

$$A = \frac{E}{L^2} \left(\frac{E}{c^2} - \frac{m}{1 + \frac{E}{mc^2}} \right), \quad B = \frac{E}{mc^2 \left(1 + \frac{E}{mc^2} \right)}. \quad - (5)$$

The precessing ellipse is:

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

so $\left(\frac{dr}{d\theta}\right)^2 = \left(\frac{Ex}{d}\right)^2 r^2 \sin^2(x\theta) \quad - (7)$

So Einstein's general relativity does not produce
a precessing ellipse. This was first pointed out
by Schwarzschild in Dec. 1915.