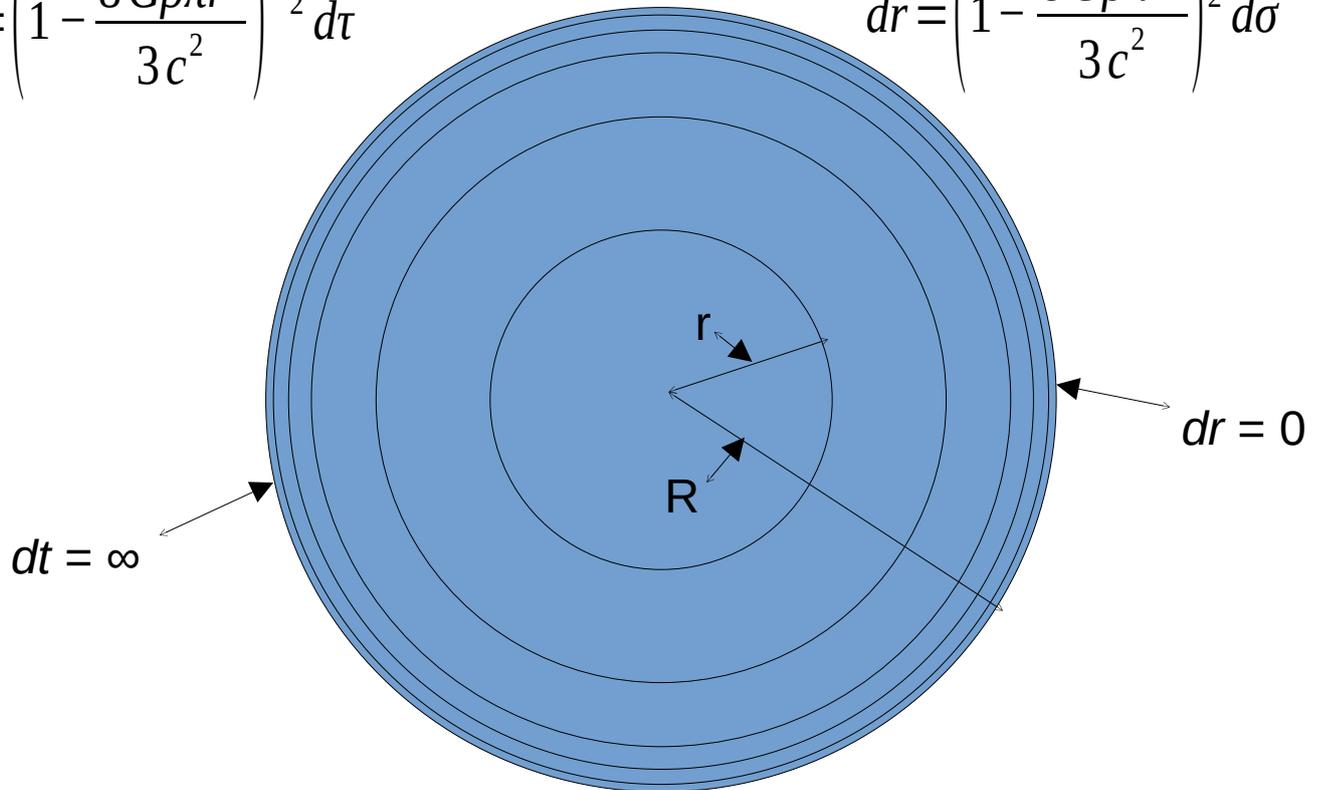


Adding shells of decreasing thickness dr to a spherical mass distribution

$$dt = \left(1 - \frac{8G\rho\pi r^2}{3c^2}\right)^{-\frac{1}{2}} d\tau$$

$$dr = \left(1 - \frac{8G\rho\pi r^2}{3c^2}\right)^{\frac{1}{2}} d\sigma$$



$$ds^2 = \left(1 - \frac{2GM}{rc^2}\right) c^2 dt^2 - \left(1 - \frac{2GM}{rc^2}\right)^{-1} dr^2 - r^2 d\theta^2 - r^2 \sin^2 \theta d\phi^2$$

$$M = \frac{4\rho\pi r^3}{3}$$

$$ds^2 = \left(1 - \frac{8G\rho\pi r^2}{3c^2}\right) c^2 dt^2 - \left(1 - \frac{8G\rho\pi r^2}{3c^2}\right)^{-1} dr^2 - r^2 d\theta^2 - r^2 \sin^2 \theta d\phi^2$$

Shells start with a thickness $d\sigma$ at an infinite distance, and are brought in to the spherical surface at a radius, r .