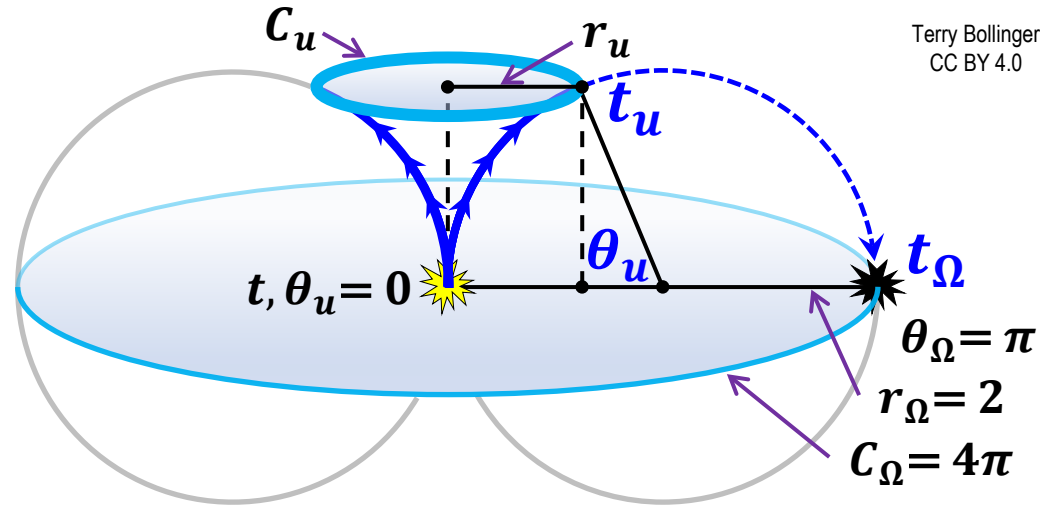


Metrics for One Cycle



$$t_u = \frac{t}{t_\Omega} \quad \theta_u = \pi t_u = \frac{\pi t}{t_\Omega}$$

$$C_u = 2\pi r_u = 2\pi(1 - \cos \theta_u) = 2\pi \left(1 - \cos \frac{\pi t}{t_\Omega}\right)$$

$$= 2\pi(1 - \cos \pi t_u)$$

$$H_t = \frac{dC_u}{dt_u} = \frac{d(2\pi(1 - \cos \pi t_u))}{dt_u} = 2\pi^2 \sin \frac{\pi t}{t_\Omega}$$