

# “Is the electron a superluminal half-photon with toroidal topology?”

$$x = \frac{\lambda_C}{4\pi} (1 + \cos \omega_{zitt} t) (\cos \omega_{zitt} t)$$

$$y = \frac{\lambda_C}{4\pi} (1 + \cos \omega_{zitt} t) (\sin \omega_{zitt} t)$$

$$z = \frac{\lambda_C}{4\pi} (\sin \omega_{zitt} t)$$

where  $\lambda_C = h / mc = 2.43 \times 10^{-12}$  m is the Compton wavelength.  $\lambda_C / 4\pi$  is the radius of a double-helix photon of energy equal to the rest energies of an electron plus a positron, and is also the helical radius of the electron model.  $\omega_{zitt} = 2\pi\nu_{zitt} = 2mc^2 / \hbar$  is the electron's zitterbewegung angular frequency. Copyright © 2018 Richard Gauthier