

Correction note to equation #515 in both AS3-II.6 and AS3-II.9

The text on page 14 of monograph AS3-II.6 - which is again cited on page 68 of monograph AS3-II.9 - and equation #515 in particular, should be corrected as follows:

Aetherometry proposes that the finite velocity v_G of propagation of the apparent force of gravity is numerically identical to the speed of light divided by the speed of the electron-graviton W_{Ge} :

$$\begin{aligned} v_G &= (c/W_{Ge}) \text{ m sec}^{-1} = c f_e \text{ sec} = c (\lambda_e f_e^2/W_{Ge}) \text{ sec} = (c/W_{Ge}) K_{krSS} \text{ sec} = 426.95 c = \\ &= 1.2799 \cdot 10^{11} \text{ m sec}^{-1} \end{aligned} \quad (515)$$

as a gravitational disturbance that spreads along an apparent dimension of abstract space. This follows from a series of interconnected facts:

First, that propagation of gravity and gravitational disturbances, though conveyed by massfree gravitons, is referred to mass - and the fundamental particulate mass is that of the electron mass-energy.

Second, that *every graviton*, no matter what mass it is affected to, experiences a *constant* cosmic acceleration directly expressed in its fine structure:

$$K_{krSS} = 100 \text{ cm sec}^{-2} = \lambda_n f_n^2 = \lambda_e f_e^2 = \lambda_p f_p^2 \quad (35, 197)$$

Third, the preceding also translates into a universal cosmic *acceleration constant* for every *massbound Planckian quantum* of angular momentum h :

$$\mathbf{a} = \alpha K_{krSS} = \alpha \text{ m sec}^{-2} = \sqrt{(\lambda_x \lambda_e f_e^4)} \quad (509)$$

Fourth, the fundamental force of gravity *in vacuo* is relayed by the electrodynamic superimposition of cosmological leptons, and directly expressible as such in the **Process B** equation by reference to the superimposed angular (Compton) frequencies of their mass-energies:

$$G = (h/E_{\delta e})^2 (c/W_{Ge}) (\alpha \text{ m sec}^{-2})^2 = (\alpha K_{krSS})^2 (c/W_{Ge}) / (2\pi\nu_{\delta e})^2 \quad (519)$$

If one asks with what power this force is transmitted and what its surface density is in any direction - then, in the process of answering these questions, one also obtains the velocity of the apparent propagation of this force. The power density, directly in (m sec^{-3}) , is given by

$$(\alpha K_{krSS} \text{ sec}^{-1})$$

and the velocity of propagation v_G is revealed by

$$\begin{aligned} G &= (h/E_{\delta e})^2 (c/W_{Ge}) (\alpha \text{ m sec}^{-2})^2 = (\alpha K_{krSS})^2 (c/W_{Ge}) / (2\pi u_{\delta e})^2 = \\ &= (\alpha K_{krSS} \text{ sec}^{-1}) [(c/W_{Ge})(K_{krSS} \text{ sec})] / (2\pi u_{\delta e})^2 = (\alpha K_{krSS} \text{ sec}^{-1}) v_G / (\omega_{\delta e})^2 \end{aligned}$$

Thus the speed of propagation of the apparent force of gravity is superluminal but not instantaneous:

$$v_G = G (m_e c^2 / h)^2 (4\pi^2 \text{ m sec}^{-1}) / (\alpha \text{ m sec}^{-2})^2 = (c/W_{Ge}) \text{ m sec}^{-1} = 426.95 c$$