

Astronomical redshift

Antonio Saraiva – 2010-11-14
ajps2@hotmail.com

See the Unified Absolute Relativity Theory at:

www.wbabin.net/saraiva/saraiva305.pdf
www.wbabin.net/saraiva/saraiva306.pdf
www.wbabin.net/saraiva/saraiva307.pdf
www.wbabin.net/saraiva/saraiva328.pdf
www.wbabin.net/stham/saraiva347.pdf
www.wbabin.net/stham/saraiva366.pdf
www.wbabin.net/stham/saraiva395.pdf

Some apparent very distant quasars are very old, because distances according to relativity theory are wrong.

The astronomical redshift is due to the transverse speed of rotation of our universe.

$$z = \frac{f_i - f_0}{f_0} ; \quad f_0 = f_i \sqrt{1 - v^2 / c^2}$$

And $v = DH_0 \Leftrightarrow$

$$\Leftrightarrow D = R_U \sqrt{\frac{z(z+2)}{(z+1)^2}} ; \quad R_U = 1.3 \times 10^{26} m = 14 \times 10^9 ly$$

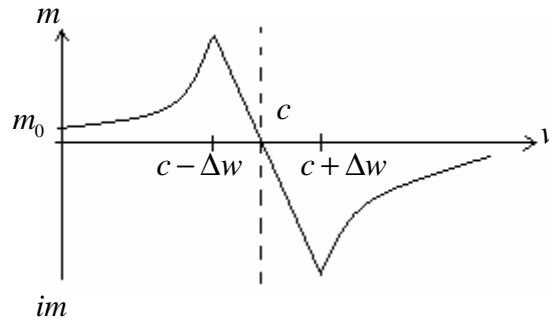
$$z = 1.3 \quad \Leftrightarrow \quad D = 0.9 R_U$$

We can't see nothing after the radius of the local universe.

z – Redshift coefficient; f – Frequency; c – Light speed; D – Distance;
 H_0 -- Hubble constant; R_U -- Radius of the local universe.

$$z \rightarrow \infty \quad \Leftrightarrow \quad D \rightarrow R_U$$

Electron mass with speed



The mass of the electron has a maximum (not infinite) and for c it's zero. Then it gets imaginary.

Wave speed of the electron:

$$w = c - \Delta w ; \quad f = 1.236 \times 10^{20} \text{ Hz} ; \quad S = 1.91 \times 10^{-34} \text{ m}^2$$

$$\Delta w = c - w = c - \sqrt{c^2 - S f^2} = \frac{S f^2}{2c} = 4.875 \times 10^{-3} \text{ m/s}$$

f – Compton frequency; $i\sqrt{S}$ -- Neutrino Compton wavelength.

$$n = \frac{c - \Delta w}{c} = 1 - 1.63 \times 10^{-11}$$

Mathematical and natural formulas:

$$m = \frac{m_0}{(1 - v^2/c^2)^{3/2}} = m_0 \frac{\sqrt{1 - v^2/c^2}}{(1 - v^2/c^2)^2 + a}$$

$$a = (\Delta w/c)^2$$

$$\frac{dm}{dv} = 0 \quad \Leftrightarrow \quad (1 - v^2/c^2) = \frac{\Delta w}{\sqrt{3}c}$$

Maximum:

$$m = \frac{m_0}{4(\Delta w/\sqrt{3}c)^{3/2}} = 8.7 \times 10^{15} m_0 = 7.92 \times 10^{-15} \text{ kg}$$

$$mc^2 = 4.44 \times 10^{21} \text{ eV} \text{ -- Cosmic rays}$$