New Horizons in Physics and Astronomy

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IS NOT

BYPANDING

and other

important facts

Auckland University Issue, May 1, 2015 Independent Science News. WHY THE UNIVERSE IS NOT EXPANDING.

Redshift

Redshift, a measurement of starlight from galaxies, shows increasing wavelength of light with increasing distance of galaxies from the Earth.

This wavelength increase was thought to mean "moving away". The further the galaxy, the greater the wavelength of the starlight, and the faster the galaxy was thought to be receding from us.

Doppler Effect

The wavelength increase of redshift measurements was thought to be like the "Doppler Effect", where, for example, an approaching motorcycle has a higher pitched (shorter wavelength) exhaust note, and the same motorcycle, receding, has a lower pitched (longer wavelength) exhaust note.

Bill Tifft's Redshift Quantization.

Bill Tifft, of the University of Arizona, has studied REDSHIFTS since 1975. He has concluded that redshifts are quantized. That is, that redshift measurements only increase in JUMPS of a wavelength of light.

Redshifts do not increase by just any value. They increase only by JUMPS of .0002406 of a wavelength, or by multiples or certain fractions of this amount.

Bill Tifft expressed this .0002406 of a wavelength as being 72.144 km/sec of recession speed.

This QUANTIZATION of redshift measurements was a MYSTERY for many years.

Quantization in Radioactive Decay Measurements.

In 2011, Independent Science News reported the finding that Radioactive Decay Measurements are QUANTIZED, just like redshift measurements. And that the quantized value of 2.406 in Table 1a (Page 3) is just the same value as Bill Tifft's .0002406.

In Table 1a the "powers of ten" are left out. The 2.406 could be written as .0002406 or even 2406, and the Table would still have the same meaning. The value 2.406 is easier to handle. It is just a convenience.

Redshifts and Radiodecay are the Same Thing.

Because their quantization shares the <u>same number</u>, this means Redshifts and Radiodecay are the <u>same thing</u>. Redshifts are about decay of light, not about galaxies moving away.

Radiodecay shows a NATURAL QUANTIZATION, and Light Decay is showing the same natural quantization.

The Big Bang Theory is Dead.

Redshifts are about LIGHT DECAY, not about galaxies moving away. The big bang theory of the origin of the universe, proposed eighty years ago, was based on the universe expanding, having exploded outwards from a very small point that contained all the matter and energy that we now see.

We now know that the universe is <u>NOT</u> expanding, and never was expanding. The Big Bang theory is therefore <u>dead</u>. Finished. Over. Obsolete. Redundant. Debunked.

Page 3

Table 1a. Quantized Radioactive Decay in 11 of the 18 Parent Radionuclides. Powers of ten dismissed.

Nuclide	Half Time	Decay Constant
Light	86.4	.03 x 2.40625
?	43.2	.06 x 2.40625
?	28.8	.1 x 2.40625
Nd 144	21.6	.13 x 2.40625
Th 232	14.4	.2 x 2.40625
U 235	7.2	.4 x 2.40625
Rb 87	4.8	.6 x 2.40625
Lu 176	3.6	.8 x 2.40625
Ŷ	2.4	1.2 x 2.40625
K 40	1.2	2.4 x 2.40625
Sm 148	.8	3.6×2.40625
Pt 190	•6	4.8 x 2.40625
Re 187	• 4	7.2×2.40625
Hf174/Te130	•2	14.4 x 2.40625
?	.13	21.6×2.40625
?	• 1	28.8 x 2.40625

Notes: 2.40625, not just 2.406, used in this edition of Table 1a, because this year, 2015, decay of light will be precisely .000240625 of a wavelength per 3 years. This is quantized decay position .03 x 2.40625 on Table 1a. Thus all other Radionuclides will have the same quantum number, 2.40625. (Powers of ten dismissed.)
When using the formula, Half life = .693 / Decay constant, quantized half times will be the exact whole numbers shown on Table 1a. Quantized Radiodecay Tables for 2015 are the STANDARD QUANTIZED RADIODECAY TABLES. They will be near enough for the next 50 years or so. For the COMPLETE Quantized Radiodecay Tables, see CDK 15 on www.lollo.org.nz
Use 2.40625 throughout.

Light Decay.

The most distant galaxies have the greatest redshifts, the <u>longest</u> wavelengths of light. The nearer galaxies have <u>lesser</u> redshifts, shorter wavelengths of light.

Light has taken more time to reach us from further out. The <u>older</u> the light, the <u>greater</u> the <u>wavelength</u>.

Light might not be decaying in transit. The generation of light, at the atomic level, may be getting less and less "vibrant". The generated wavelength might be getting smaller and smaller, by quantized amounts, over time. Whatever the process, newer light has a smaller wavelength than older light. Light is decaying.

Speed of Light Decay.

How fast is light decaying? It can be shown that the generated wavelength of light is decaying this year by .000240625 of a wavelength per three years.⁵

This means that the SPEED of light is decreasing.

Same frequency, shorter wavelength generated, slower speed.

The speed of light for 2015 can be given as 298,102.5 km/sec, 6 decreasing at 23.91 km/sec/year. It should be noted here, that because the <u>decrease</u> is quantized, the slowing speed may well be in jumps. Three yearly? Or more frequently?

The Half Life of Light.

The half life or half time of a decaying substance is the time it takes for it to decay away until only half of it remains. In the case of decaying light, half life means decaying until only half the wavelength, or half the SPEED, remains.

The half life of light is 8640 years. See the top of Table 1a, where light is fitted at the QUANTIZED half time position 86.4. Remember that the "powers of ten" are excluded from Table 1a.

The Constant Speed of Light.

For many years now, light speed has been measured using atomic clocks. Because the atomic clocks are slowing with the slowing speed of light, change in light speed is never detected.

Light Speed in 1945.

Light speed in 1945 was 299,792 km/sec, today's "constant" speed of light.

Note that atomic clocks keep the speed constant, and that 1945 was the dawn of the atomic age. Coincidence?

The Mysterious Greek Letter Lambda

Consider that the Greek letter lambda (λ) is used as a shorthand symbol for <u>BOTH</u> WAVELENGTH OF LIGHT and for <u>DECAY RATE of RADIOACTIVE MATERIALS!</u> The <u>SAME SYMBOL</u> is used because LIGHT, and RADIONUCLIDES are doing the SAME THING. They are BOTH DECAYING.

Or is the use of the same symbol, λ , just another "coincidence"?

Relativity and Reality.

Is relativity real? 10 Relativity used to explain how light from galaxies still came back to us at the speed of light, when those galaxies were supposedly speeding away from us at 0.2 and more of light speed. 11 Now that galaxies are known to be NOT speeding away, is Relativity any use?

Relativity states that the speed of light is always the same, no matter what the speed of any moving frame of reference.

But in their redshift quantization studies, Guthrie and Napier had to allow for the Earth's (and Solar System's) rotation speed around the centre of our Milky Way Galaxy.

The "greatest triumph" of Relativity ever, was in explaining an error in predicting the perihelion of Mercury. But this error is now explained perfectly by slowing light speed. 12

The Age of Light.

By mathematical and other methods, 13 the starting date of speed of light decay (cdk) processes can be pinpointed to 4219 B.C. (6233 years ago.) Because light was so very fast before this time, the oldest light we see tonight is essentially 6233 years old this year, 2015. 14

The total look back time in the universe is 6233 years.

The Start of Radioactivity.

If, prior to 4219 B.C., there was radioactivity with very fast speed of light, all radioactive stuff would have decayed instantly. Fast speed of light, fast decay, all gone. 15 Radioactivity can only have begun when speed of light decay began. Radiodecay was initially very fast. No radiodecay before 4219 B.C. Speed of light decay and radio decay are the same thing, and started at the same time.

Volcanism.

All lava from volcanoes is radioactive, suggesting

that initial, fast, hot radioactive decay at onset of speed of light decay (cdk) led to melting of lava type rock. Heat has been contained and maintained in the lava ever since. Note that radioactivity would not have been possible before 4219 B.C.

Cratering of Moon, Mercury, Asteroids etc.

Cratering of the Moon, Mercury, asteroids, and so on, is from sudden, rapid onset of volcanism at the start of cdk and radioactivity. Asteroids <u>flowed</u> out of shape. 16 Craters are hot spots of volcanic activity.

The Lollo papers. Numbered references within the text are references to the Lollo papers. See www.lollo.org.nz

(1) CDK 12, page 10, line 4. CDK 7, page 1, paras 1,2,3

(2) CDK 12, CDK 13, CDK 14, CDK 15.

(3) CDK 12, page 10, line 6. CDK 13, page 5.

(4) CDK 13.

(5) CDK 4. (speed2015-speed2016)/speed2016 all times 3 See also CDK 11, page 5, item 8 espec. last comment.

(6) CDK 4, page 4. Calculate speed for 2016.

- (7) Half life = .693/(.000240625/3) The figure in brackets is the decay rate for one year of light decay.

 See also CDK 12, page 1, footnote.
- (8) CDK 4, page 3, paragraph 2; page 6.

(9) CDK 4, page 3.

(10) CDK 4, pages 6 and 7.

(11) CDK 5, pages 3,4,5,6. Note Relativity comment, page 7.

(12) CDK 9. See also CDK 6. These papers view light speed as slowing in transit. This is fine for calculation purposes. Scrutiny of Mercury and Pioneer records might reveal incremental degradation of light propagation in units as small as Bill Tifft's 2.67 km/sec. See CDK 10, page 1 etc.

(13) CDK 1, page 2, last 2 paras, starting, "Somewhere.." page 4, para 1.

- (14) The Age of Light, page 2. The Shape of the Universe, espec page 5, para 4. CDK 8, espec pages 5 and 6.
- (15) CDK 1, page 1, last para; page 2, first para; page 3, last 2 paras. The Age of Light, page 3, espec last para; page 4.

(16) CDK 11, page 12, item 23. www.lollo.org.nz