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BILL TIFFT'S .00241 DIVIDES DECAY SERIES OF TENTHS TO GIVE URANIUM DECAY HALF TIME

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c/o University of Auckland,
New Zealand.

CDK, SERIES, AND
URANIUM 238 DECAY

CDK 11

DECAY SERIES OF TENTHS

URANIUM DECAY $\frac{1}{2}$ TIME

$$\frac{10^6+10^5+10^4+10^3+10^2+10^1+10^0+\ldots}{.000241} = 4.61 \times 10^9$$

See Page 10 !

BILL TIFFT'S .000241

CDK, SERIES, AND URANIUM 238 DECAY. 3/02/11

A summary of the main points of CDK11.
Designed for easy reading! (Remember that these points are open to discussion.)

- CDK matches uranium decay.
- Uranium decay in the past was much faster than today.
- Both speed of light decay and uranium decay are dependent on series of numbers, like in Bill Tifft's 1/3's series - see CDK 10. (e.g. the number 6224 is a SERIES)
- The MAIN decay processes of both light and uranium 238 decay were completed quickly. AVERAGE speed of decay has since been dependent only on 'powers of ten'- see CDK 3, 6, IDEA 2.
- Because of the special relationship of CDK to uranium decay, only 1/2 of the uranium 238 will ever decay away.
- The series involved in CDK make for 1.5, 1.35, and power of ten values seen in quantized redshift measurements. The series seem to be responsible for the quantized redshifts. There is a vernier effect, like on vernier callipers, one value accentuating another.

If you don't like numbers, don't read further!
Cheerio from me, the Editor, and Regards from the lollo team: Mrs H, Bill, Sparrow, & Inky.

CDK, SERIES, AND URANIUM 238 DECAY. 3/02/11

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CDK 11.

(1) $$\frac{1.5 \times 10^6}{.000241} \times \frac{1}{1.35} = 4.61 \times 10^9$$

The 4.61×10^9 figure is the half time value for uranium 238 decay.

1.5×10^6 is light years of travel (averaged) per .000241 of QUANTIZED change in wavelength of light (i.e. redshifts of 72 km/sec) out to a distance of 1.35×10^9 light years. (Fred's old redshift limit)

(Note that 72 km/sec per 1.5 million light years is the same as Fred Hoyle's 100 miles per second per million parsecs.) Cdk 7 and cdk 5, page 2.

The 1/1.35 seems to modify the average light years of travel per change in c. IT MAY PROVIDE A <u>VERNIER</u> INTERFACE OF 1.5/1.35 = 10/9 AND THUS PROVIDE A <u>MECHANISM</u> FOR <u>QUANTIZATION</u>. See note (15).

<u>NOTE</u> THAT 1.35×10^9 L.Y. is at redshift = 0.2c, which is a <u>natural limit</u> in redshift observations <u>today</u>. Cdk 5, page 3.

(2) There are series involved. $\frac{1.5}{.000241} = 6224$

This 6224 is $\sum_0 (1 - .000241)^n = \frac{1}{1 - x}$

$= \frac{1}{.000241}$

$= 4149.3775$

(3) The <u>UNIT</u> in (2) is 1.5,

so that 1.5 x 4149.3775 = 6224

(See footnote.)

<u>Footnote to</u> (3).. Light goes in threes (Maxwell) Decay = 3/2 ? Compare Bill Tifft's 1/3's series which converges to 1.5. (CDK10) (16/11/2000) Goes in 3... decays in 1/3's ?

(4) DEFINITION OF 6224... 1.5 times the sum of all possible decreasing values of $(1 - .000241)^n$, which converge to a maximum possible <u>ever</u> of 4149.3775 units. A <u>converging series</u> of the form...

$$\sum_0 x^n = 1 + x + x^2 + x^3 + x^4 \ldots = \frac{1}{1 - x}$$

for $-1 < x < 1$, not 0.

• 6224 <u>need</u> not be a <u>time</u> line. (But it sure <u>works</u> pretty well!)

(5) Conventional $\frac{1}{2}$ life of uranium is...

$$\text{HALF LIFE} = \frac{\log_e 2}{\text{DECAY CONSTANT}}$$

$\log_e 2$ ⟵ A SERIES (+ & -)

DECAY CONSTANT ⟵ NEGATIVE

$\log_e 2$ is a SERIES formed by taking the integral of each side of the series...

$$\frac{1}{1-x} = 1 + x + x^2 + x^3 \ldots$$

(Newton proved this.)

$$\Rightarrow \quad -\log_e(1-x) = x + \frac{x^2}{2} + \frac{x^3}{3} + \frac{x^4}{4} + \ldots$$

$$\log_e(1-x) = -x - \frac{x^2}{2} - \frac{x^3}{3} - \frac{x^4}{4} - \ldots$$

Hence, when $x = -1$

$$\log_e 2 = 1 - \frac{1}{2} + \frac{1}{3} - \frac{1}{4} + \frac{1}{5} \ldots\ldots = 0.693\ldots$$

Notice the plus and minus look. (Harmonic, but + & -)

Conditionally convergent series. Cannot be added up other than in order.

(6) Because the decay constant in (5) is negative, the $\frac{1}{2}$ time must assume a negative value.

$\sum_0 (-1/2)^n$ converges to...

$$1 - 1/2 + 1/4 - 1/8 + 1/16 \ldots\ldots = 1/1.5$$

(7) Decay constant of uranium 238 given as

$$\frac{-1}{6500 \text{ atoms}} \text{ per million years.}$$

(1956 publication)

This is $\dfrac{-1.5}{6500 \text{ atoms}}$ per 1.5 million years.

or (within 4.3 % of) $\dfrac{-.000241 \text{ atoms}}{1.5 \text{ million years}}$

Compare with quantized redshift values

Compare 4.61 value of ½ time in (1).

(8) Current rate of cdk today = .000241c / 3 years

(See CDK 8, p1)

either

OR 3 light years of travel / .000241 quantized change in c.

(FALL IN LIGHT SPEED IS.....

24 km / sec / annum.) See CDK 4, p4.

(Compare change in value of electrostatic and electromagnetic standards, showing same 24 km/sec/annum <u>worth</u> of <u>drift</u>.)

(9) Rate of light travel per quantized redshift in the past (averaged)....

1.5 million l.y. travel / .000241 quantized redshift

---- this <u>was</u> ! $\frac{1}{2} \times 10^6$ times faster than today.

(10) IF uranium decay rate connected to light speed, then uranium decay (average) was, in the past,

$$\tfrac{1}{2} \times 10^{6} \times \frac{-\ .000241 \text{ N atoms}}{1.5 \text{ million years}} \qquad \text{See (7).}$$

$$= \frac{-\ .000241 \text{ N atoms}}{3 \text{ years}}$$

The average rate of (uranium) decay IN the past was the same as (within 4.3 % ? See (7).) CDK today.

(11) Because 6224 is a series of 1.5's decaying as ONES, i.e.

$$6224 = 1.5 \times \sum_{0} (1 - .000241)^{n} = 1.5 \times 4149.3775,$$

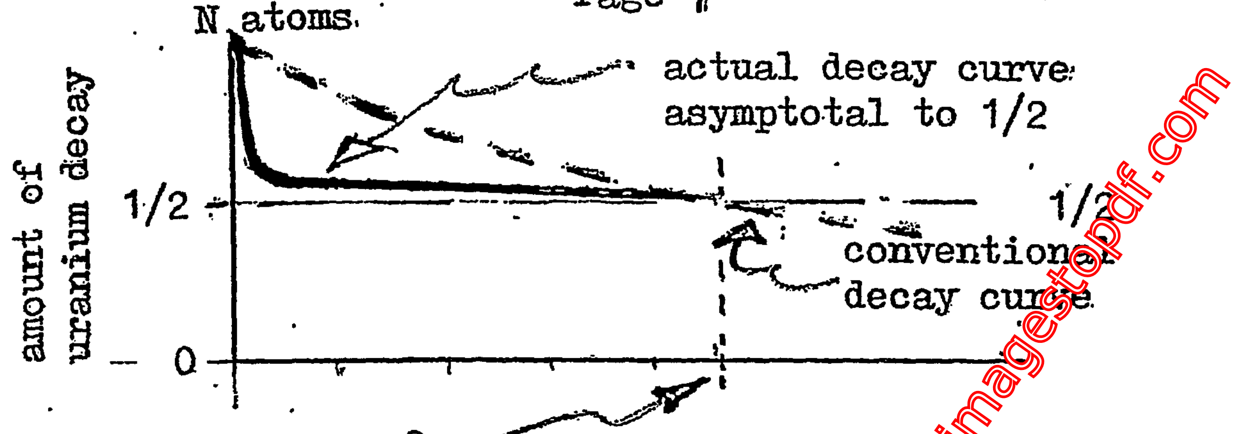
the averaged result (10) may be used to find total amount of uranium decay in the 6224 series.

(Total possible decay ever -)

$\dfrac{.000241 \text{ N atoms}}{3 \text{ years}}$	$\times\ 6224 =$	.4999946 N atoms (at series limit)

NO MORE THAN ½ DECAY EVER POSSIBLE!!

(12) It is concluded that the decay of uranium 238 will never (IF connected to the series of CDK) exceed the (within 4.3 % ? - see (7) & (10)) ONE HALF DECAY MARK.



4.61×10^9 decay years at today's rate of decay.

(13) CDK 2 (Calculus) shows integral of $y = \sqrt{x}$ as ... $2/3 \times \sqrt{x^3}$, which is $\frac{x^{1.5}}{1.5}$ (area)?

Look at the per 1.5 value.

Like the .000241 per 1.5 million light years.

See note (6).

(14) Also, the $x^{1.5}$ can be written as

$$x^{1.35} \cdot x^{.135} \cdot x^{.0135} \cdot x^{.00135} \cdots = x^{1.5}$$

or

1.35	1.35×10^0
.135	10^{-1}
.0135	10^{-2}
.00135	10^{-3}
.000135	10^{-4}
.0000135	10^{-5} ...

See the SIMILARITY HERE TO THE ADDITION TRIANGLES of CDK 10, p6, and CDK 7, page 9.

(Put this triangle beneath the CDK 10 triangle.)

ALSO: See the 1.35 similarity to Fred's redshift limit of 1.35 x 10^9 l.y.

(15) Here is the addition triangle from p6 of CDK 10 for comparison with the triangle in (14) above.

1,350,000,000	1.35×10^9
135,000,000	1.35×10^8
13,500,000	1.35×10^7
1,350,000	1.35×10^6
135,000	1.35×10^5
13,500	1.35×10^4
1,350	1.35×10^3
135	1.35×10^2
13.5	1.35×10^1
+ 1.35	1.35×10^0
1,499,999,999.85	1.5×10^9

See how the tens add to give a 10/9, 'vernier' look.

(10/9 = 1.1111111...)

$$10^0+10^1+10^2+10^3+10^4+10^5+10^6+10^7+10^8+10^9 = 111111111$$

DO THE 10's GIVE THE VERNIER LOOK, HENCE QUANTIZATION?

(The triangles of (14) and (15) are continuous, triangle 15 above 14. The 1.35 position is kind of arbitrary. The TREND is 10 less each time, moving down the columns.

(16) Because CDK was initially so rapid, the 6224 series was complete very quickly. Compare CDK 3 (Timing is everything) where the man is very quickly 'nearly at the shops'. CDK 3, p5, IDEAS 1 & 2.

Idea 2 shows that the <u>AVERAGE</u> speed or decay amount will, <u>from</u> a very <u>rapid</u> (near) completion, be from then on dependent only on <u>powers</u> of ten.

Pick a power....!!

Ten times the time ? ten times <u>less</u> average speed.

10^6 times the time ? 10^{-6} times average speed.

And so on.

(17) $(6224)^4 = 1.5 \times 10^{15}$ (Try it!) (6224? - see notes 2, 3, 4 & 11)

See that $\dfrac{1.5 \times 10^{15}}{.000241} \times \dfrac{1}{1.35 \times 10^9} = 4.61 \times 10^9$

Fred Hoyle's redshift limit. (the whole thing)

Compare (1)

Compare T^4, (i.e. $time^4$) CDK 8, p10, para 4.

CDK 2, p1, last para.

Compare space size note, p.11, CDK 7.

Space is looking pretty big!

$(6224)^3 = .000241 \times 10^{15}$ See CDK 2

(18) Because $\dfrac{1.5 \times 10^6}{.000241} \times \dfrac{1}{1.35} = 4.61 \times 10^9$,

See (1) OR (17).

and the $\dfrac{1.5}{1.35}$ is 1.111111, it means that

(to Page 10)

the expression can be written as

$$\frac{1.1111\dot{1} \times 10^{6}}{.000241} = 4.61 \times 10^{9}, \quad \text{OR....}$$

$$\frac{10^{6}+10^{5}+10^{4}+10^{3}+10^{2}+10^{1}+10^{0}+\ldots}{.000241} = 4.61 \times 10^{9}$$

This is quite an elegant way to write the expression!
(Compare (16) 'DEPENDENT ON powers of 10')
The most graphic demonstration of numerical connection, CDK to uranium decay.

(19) Because $\frac{1}{.000241} = 4149.3775$, then

$$4149.3775 \times (10^{6}+10^{5}+10^{4}+10^{3}+10^{2}+10^{1}+10^{0}+\ldots) = 4.61 \times 10^{9}$$

and an addition triangle can be formed....

4149377500	4149.3775 x	10^{6}
414937750	"	10^{5}
41493775	"	10^{4}
4149377.5	"	10^{3}
414937.75	"	10^{2}
41493.775	"	10^{1}
4149.3775	"	10^{0}
414.93775	"	10^{-1}
41.493775	"	10^{-2}
+ 4.1493775	"	10^{-3}
		.
4610419443.5834025		.
		.

122334443 33221 ← "and carry"....

these are interesting!

(20) For comparison, the conventional ½ time of uranium 238 is given as...

$$\tfrac{1}{2} \text{ time} = \frac{\log 2}{1.5 \text{ atoms per } 10^{10} \text{ atoms per year}} \text{(1984 value)}$$

$$= \frac{.693}{1.5 \times 10^{-10}}$$ (See item (5) - log 2 is a series!)

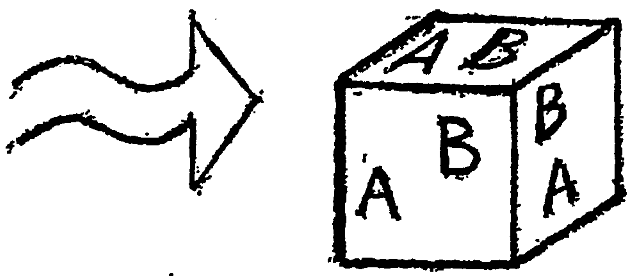
$$= \underline{4.62 \times 10^{9}}$$ Compare (18)

(21) The reason that <u>all</u> uranium did <u>not</u> decay away at CDK is <u>now</u> <u>evident</u>, in that the decay rate is $\tfrac{1}{2} \times 10^{6}$ times <u>SLOWER</u> than CDK processes. (See notes 7 - 12)

In the case of <u>short</u> half life material, renewable today, the <u>half life is caused</u> by <u>shielding</u> or by <u>dilution</u>, one or the other, from <u>influence</u> of light speed (pressure).

RADIOACTIVITY IS NOT A RANDOM PROCESS!

(lollo, <u>not</u> <u>lotto</u>!)



AT ½ LIFE
(½ A decayed to B)

Influence is shielded or diluted at ½ life.

This shielding or dilution will continue 1/2, 1/4, 1/8 & so on, to give a decay series.

This is the difference between primordial uranium dk and short term dk.

(22) There will be drift noticed in timing of decay processes (short term) as light speed slows at 24 km/sec/annum. (Depends on how long the decay time is) The nice ½ time decay series will be extended slightly. (For periods more than 3 years? Recall .000241 per 3 years: but Bill Tifft's smaller divisions might be noticed if quantized drift.) (Testable?)

?!!

DRIFT: Quantized or continuous? Opportunity knocks!!
i.e. Drift in ½ time decay series because of slowing light speed.

(23) Cratering of moon, Mercury, asteroids & so on, likely from rapid onset of volcanism at cdk start. Impacts on moons of asteroids (yes they have moons! — "companions") and the asteroids themselves would completely upset the orbital motions. (Orbits, by their nature, are not stable.)

One large crater on Mimas is 1/3 diameter of this moon! Little uplift at centre. Cannot be from impact, or Mimas would not be in orbit any more. The old idea of volcanism (very intense!) seems much more likely than impact. Mimas' big crater with 'pimple' at centre shows this type of crater (with central pimple) not impact crater. Some cratering from splash-back of ejected material into plastic or semi plastic lava flows. Intense radioactive heating is cause of cratering. Hotspots!

Asteroids have flowed into 'potato shapes'. Ceres & so on still spherical. (Some asteroids spherical still. All, originally, one would suppose.)

FRED'S OLD REDSHIFT LIMIT.

(24) $$\frac{1.35 \times 10^9}{.000241 \times 900} = 6224.066 \times 10^6$$

900 'speed jumps' of .000241.

Just rearranging the same old numbers!