

Expansion **IS WAS** Gravity

Dec 2020

CASIMIR-GRAVITY. I now believe that this idea, Casimir Gravity, has merit. Go to my blog and follow the TAB "Gravity" to read the arguments for this theory.

Monday, 9 March 2015 GRAVITY - A NEW THEORY

<https://noelhodson.blogspot.com/2015/03/gravity-new-theory.html>

DEC 2014: I am now exploring if shielding electro-magnetic waves, with layer on layer of matter, creates the "ever tightening knot" of gravity, evident in large masses. Is Casimir the primary pull of gravity, preceded by Hubble Expansion?

[Read Here.](#)

19 FEB 2016 - Read a new very short sum [NEW GRAVITY - SUMMARY](#)

[Link](#)

Gravity is the relative absence or reduction of the pressure of the radiation that fills the universal ocean of radiation, which is from 13.7 to 43.7 billion-light-years deep.

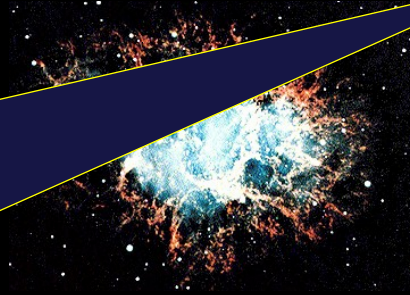
Contemplate "The ever tightening knot of gravity, ultimately resulting in black-holes" and "Counter-intuitively, the centre of the Sun is very dark" because the centre is most "shaded" or protected from or excludes the universal radiation. (NB between masses as per Casimir). The external radiation is the **PUSH and the internal partial absence of radiation is the **PULL** of gravity. NCH March 2015**

Rather than deleting earlier ideas, Slides 0 to 24, I've added slides in Dec 2020 – the Covid-19 plague year – to expand on Life, The Universe & Everything.

Expansion **IS** Gravity

Note - Dec 2014.
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Expansion?

[Read Here.](#)



Gravity * Dark Matter * Dark Energy

From Light to Matter

The Aether * The Life Force

Russian Dolls * Enfolded Dimensions

The Sentient Universe

Our Eternal Legacy

Note - Oct 2014. 15 years
after forming this EIG
idea, I am being more &
more persuaded by The
Electric Universe theory,
which may contradict the
Big Bang and sabotage
my EIG theory.

You should perhaps read
it. [Click Here:](#)

[Author](#)
[Noel Hodson CV](#)

Untested novel speculations – do **not** include in your exam answers.

Before space-time, a phrase which is a logical contradiction, there was No-thing.
no universe, no energy, no material, no phenomena, no boundary - nothing.

Without reason or known cause,
other than Richard Dawkin's and Stephen Hawking's capricious gods,
physicists believe and mathematicians calculate
that an energetic singularity, a dimensionless point, a white-hole, appeared
in this inexplicable, indescribable, non-existent no-place and no-time.



Until the location of the white-hole is known, as nothing is knowable about the
pre-existent No-thing, there might be many white-holes pouring infinite energy
into the universe. But, unless Fred Hoyle resurrects and retracts his recantation,
The scientific consensus is that just one singular white-hole existed or exists.

EIG 3 of 23 In the beginning was darkness and potential.

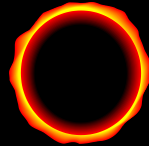
This singularity is the opposite to a black-hole that draws everything in.

- It is a white-hole -

from which everything flows outwards. It is the seed of the Big-Bang.

The white-hole-singularity exists, or stands out, in No-thing.

Space-Time does not yet exist. There is no universe.



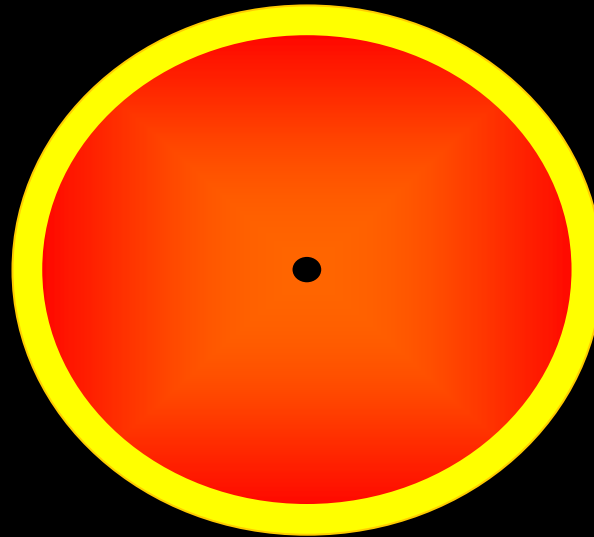
This fabulous seed contains the potential energy,
information and organisation

for all phenomena, in all space, for all time;
including every human birth, life and death.

The universe gives birth to intelligence, which
infers sentience, which in turn infers communication,
within the stuff of this seed.

Energy explodes from the white-hole into the No-thing – THE BIG BANG!

The universe begins. The universe exists within a boundary.
Inside the boundary there is energy. Outside the boundary there is No-thing.
Inside and Outside are indefinable dimensions.

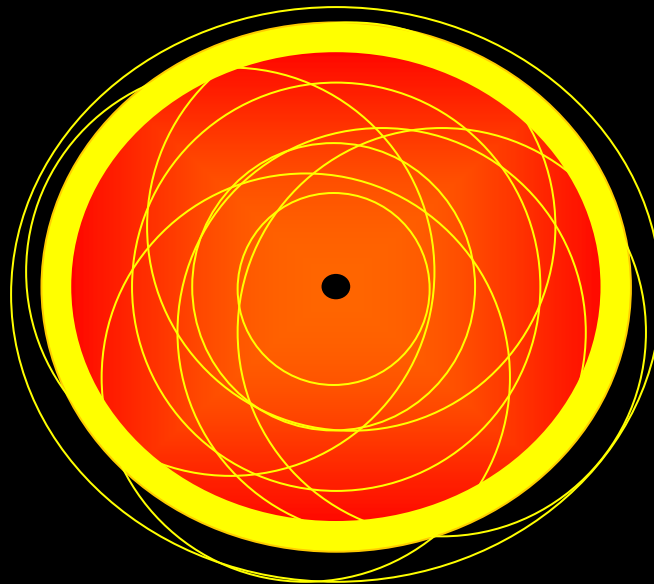


EIG 5 of 23 In the beginning was darkness and heat.

13.75 billion years ago - energy exploded from the white-hole into the No-thing.

THE BIG BANG!

There is no external resistance to the expansion of the energy.

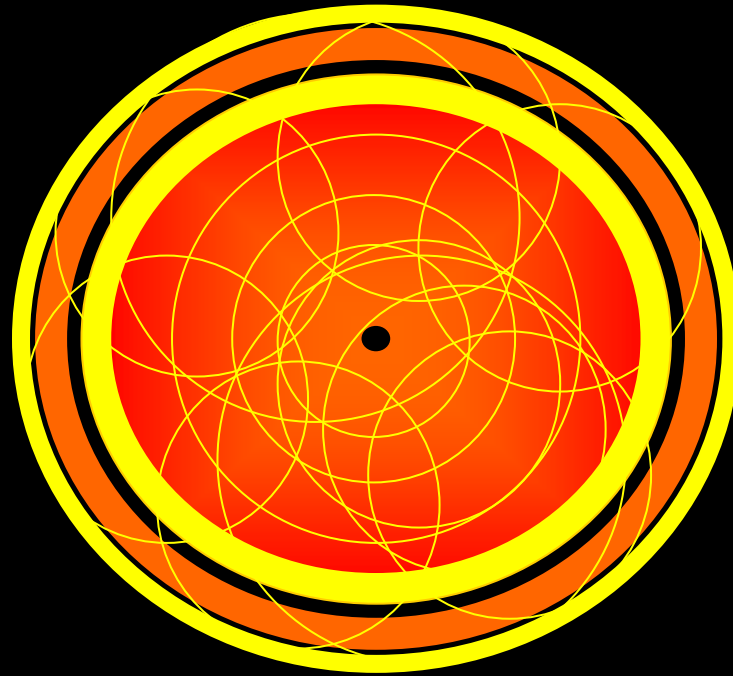


The energy is light. It is very energetic – trillions of ⁰ Kelvin.
It is invisible, as no matter exists to reflect the light.
And there are no observers to see the light.

EIG 6 of 23 In the beginning was darkness and a field.

Hubble expansion of the primordial energy meets no external resistance, but the expansion attenuates the energy which resists annihilation, resists infinite scattering into the No-thing, as an integrated coherent field.

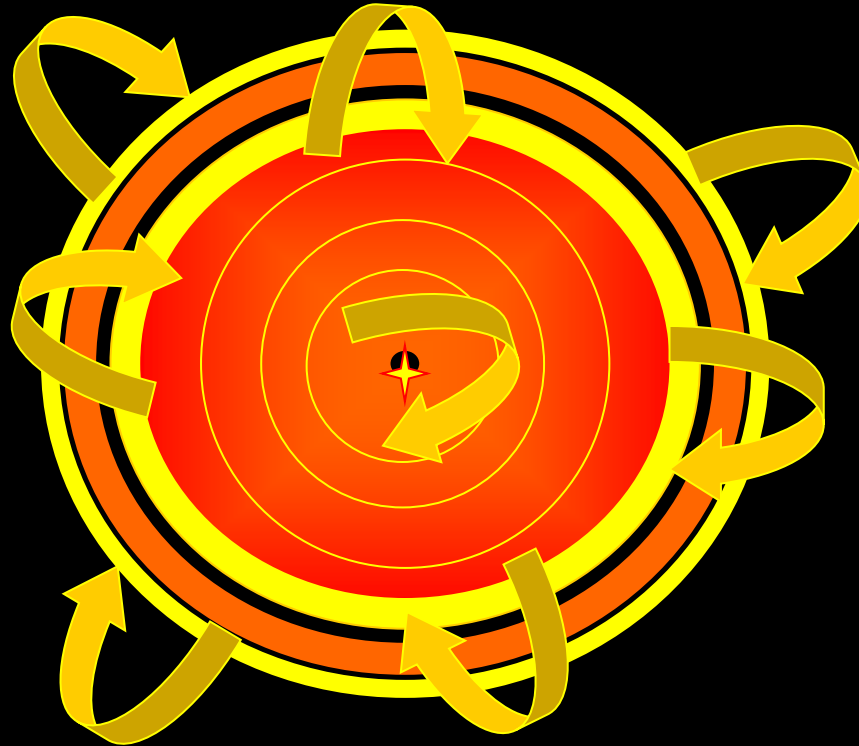
The cohering field forces portend sentence in this universe, which will, after a time, give rise to human intelligence – which might one day lead to reason.



It is still very, very hot. It is still utterly dark
as no particles exist to reflect the light.

EIG 7 of 23 In the beginning was darkness and Quanta.

Hubble expansion continues. There were two short periods of hyper-inflation. This new idea, EIG, is that as the field flows outwards, its internal cohesion, its field forces, acted and still act as a brake on infinite acceleration, as attenuation of the hot, dense field creates momentary...

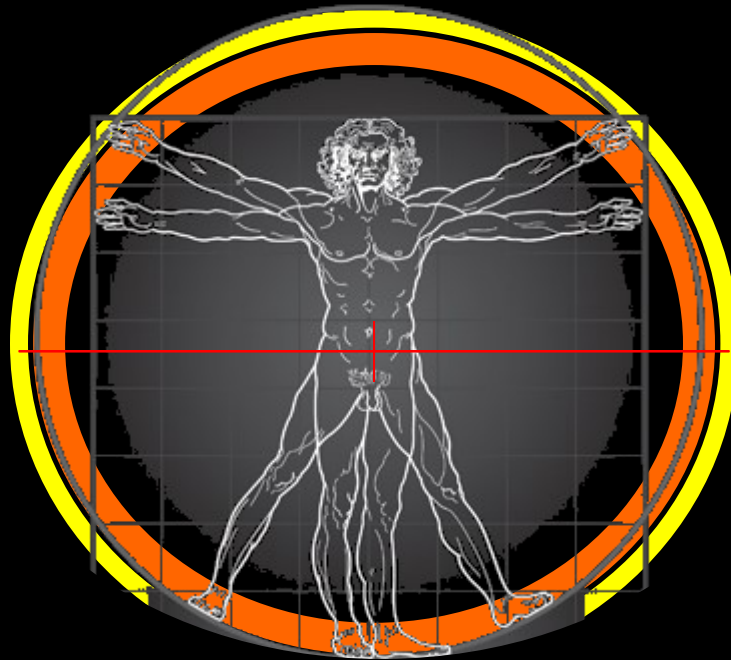


...regions of less density - partial vacuums - which attract energy, creating a pulse and restricting the rate of expansion to light-speed, C , 300,000 km per second. This expand-then-fill pulse, quantises the universe.

EIG 8 of 23 Let there be light!

At every scale, immense to minuscule, Hubble expansion continues, today observable space-time expands at $6.819\text{E-}19$ percent per second.

(If the diameter of the observable universe is 43.7 billion light years as recently calculated – or if based on the age of the universe, 13.75 billion light years, then at $2.304\text{E-}18$ percent per second)

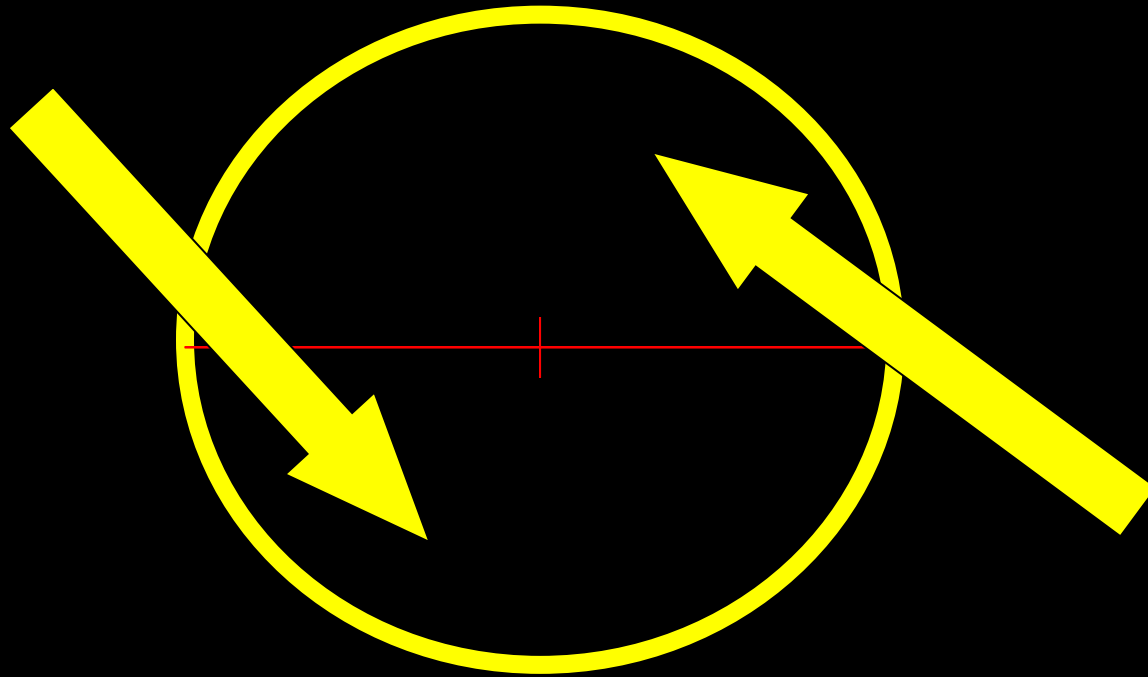


Imagine a sphere expanding at $6.819\text{E-}19$ % per second from a man-sized diameter of 2 metres. In one second it increases the volume of the sphere and attenuates the energy in the sphere by $(4.19 \text{ cubic metres} \times 6.8\text{E-}19\%)$ or a tiny $2.8\text{E-}20$ cubic metres. —

EIG 9 of 23 Let there be light and vacuums!

At every scale, immense to minuscule, Hubble expansion continues.

Today it is expanding space-time at $6.819\text{E-}19$ percent per second.

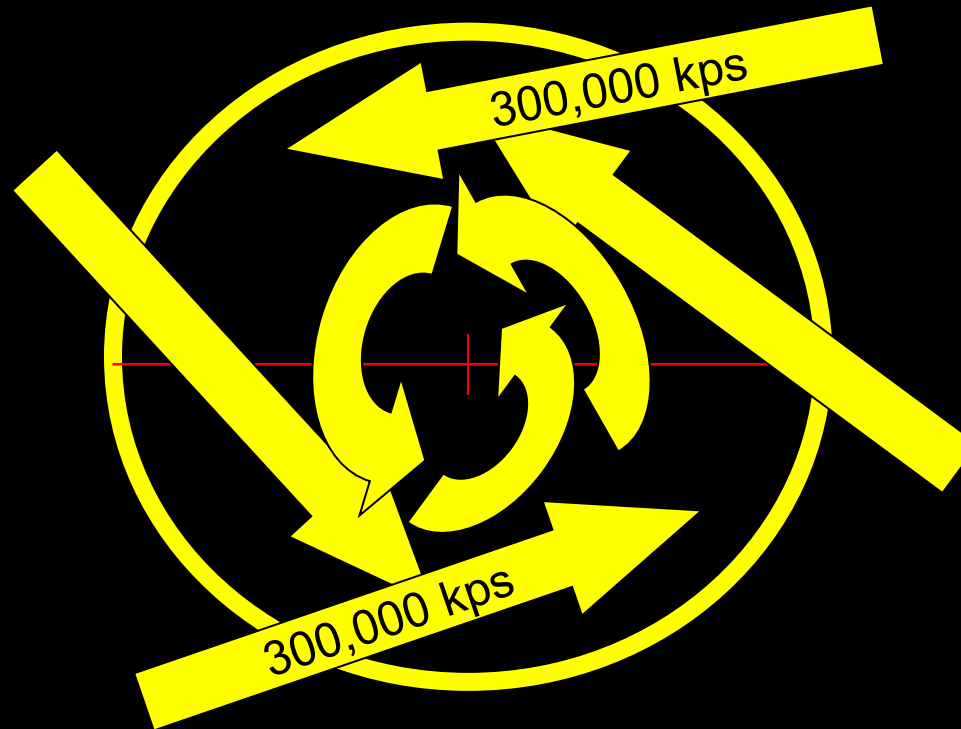


A minuscule sphere expanding at $6.819\text{E-}19$ % per second.

In one second it increases the volume and attenuates the energy in the sphere.

The surrounding energy field, light, rushes in to balance the field; at the speed of light.

In some instances, as light moves into an attenuated, partial vacuum region, waves collide at angles that create spin, making a vortex. Expansion is continuous, drawing in more energy. The spin increases, winding energy into matter – a primary-particle, a fractal, perhaps a quark, is born.



The primary vortex-particle, is a product of 3 vacuums or attenuated fields. First, the arching back as the primordial energy explodes into the No-Thing and attenuates. Second, the field attenuation from constant Hubble expansion, as above. Third, the spinning vortex draws in energy to its rotating surface, whose speed creates a material surface. Like a cyclone or tornado, immediately beyond the surface is a region of low-pressure.

EIG 11 of 23 Let there be light! - Vacuum Power.

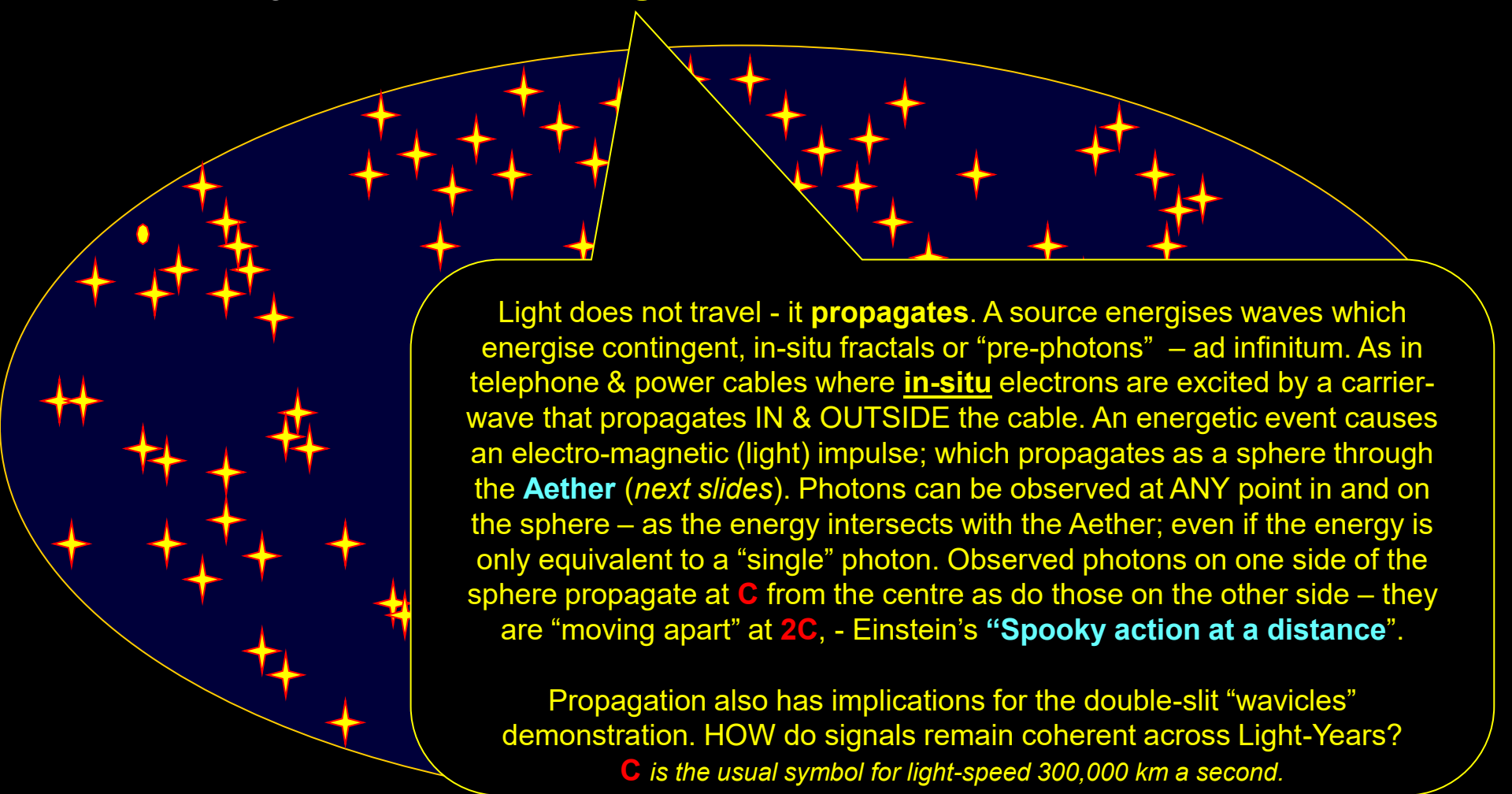
As particles/fractals precipitate or emerge from the energy-field, each fractal concentrates volumes of light, ($E=MC^2$), depleting the energy field, reducing it's cohering forces. This allows acceleration of Hubble Expansion. The more matter is formed, the less dense the energy-field, then the faster space-time expands.

This letting-go is **Dark Energy**. It is everywhere, on every scale.



Dark Matter is Hubble Expansion, from the original Big Bang, everywhere at every scale, causing the field to attenuate; to partially evacuate, which causes a constant in-falling of light energy, onto a multitude of attenuating spheres - which is **Gravity**.

As trillions of particles/fractals come into existence, and combine, creating matter; the primordial expanding hot plasma clears and light reflects from objects. The universe gives birth to visible **light**, and to darkness within matter.



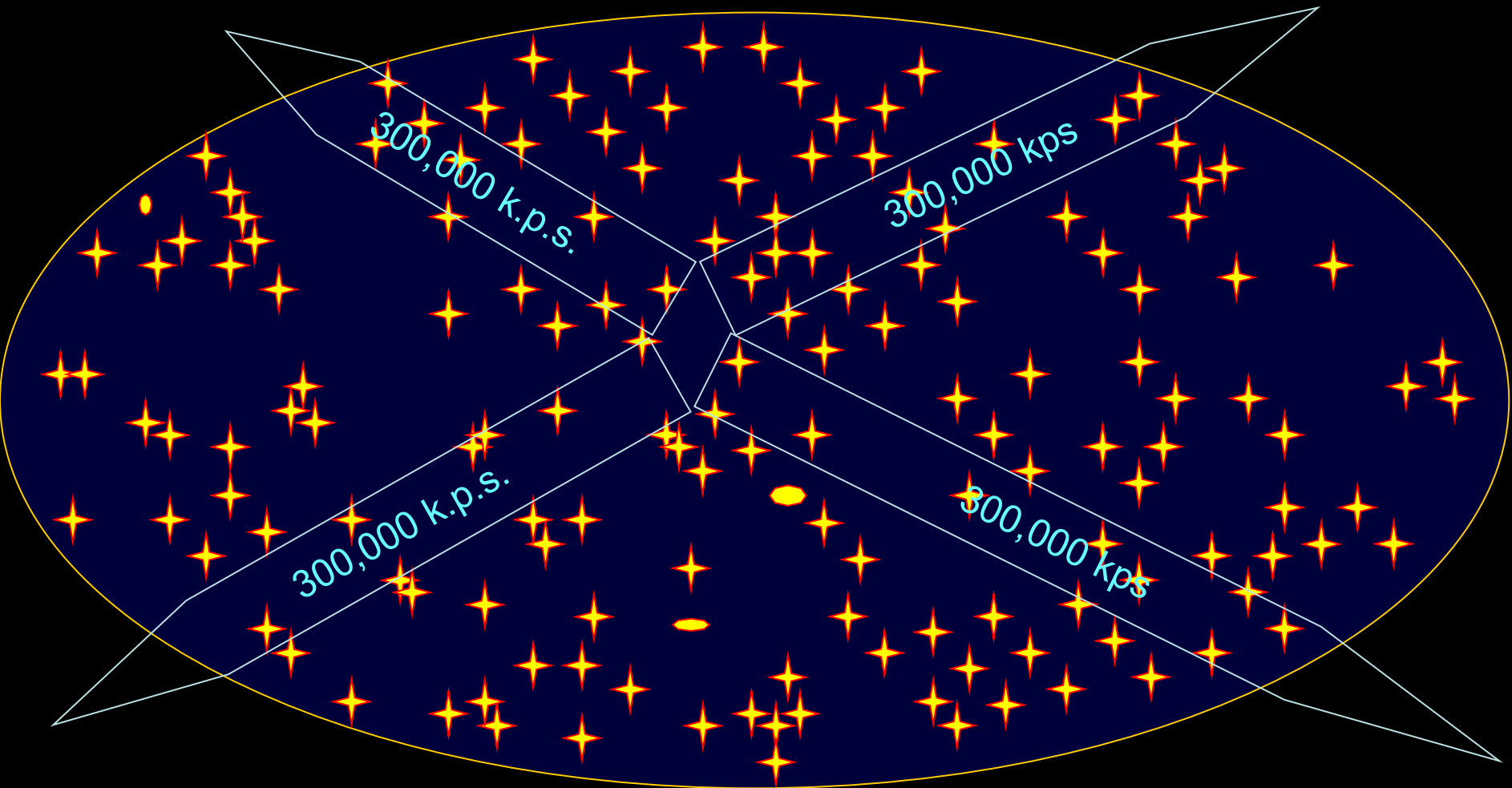
Light does not travel - it **propagates**. A source energises waves which energise contingent, in-situ fractals or “pre-photons” – ad infinitum. As in telephone & power cables where **in-situ** electrons are excited by a carrier-wave that propagates IN & OUTSIDE the cable. An energetic event causes an electro-magnetic (light) impulse; which propagates as a sphere through the **Aether** (*next slides*). Photons can be observed at ANY point in and on the sphere – as the energy intersects with the Aether; even if the energy is only equivalent to a “single” photon. Observed photons on one side of the sphere propagate at **C** from the centre as do those on the other side – they are “moving apart” at **2C**, - Einstein’s “**Spooky action at a distance**”.

Propagation also has implications for the double-slit “wavicles” demonstration. HOW do signals remain coherent across Light-Years?

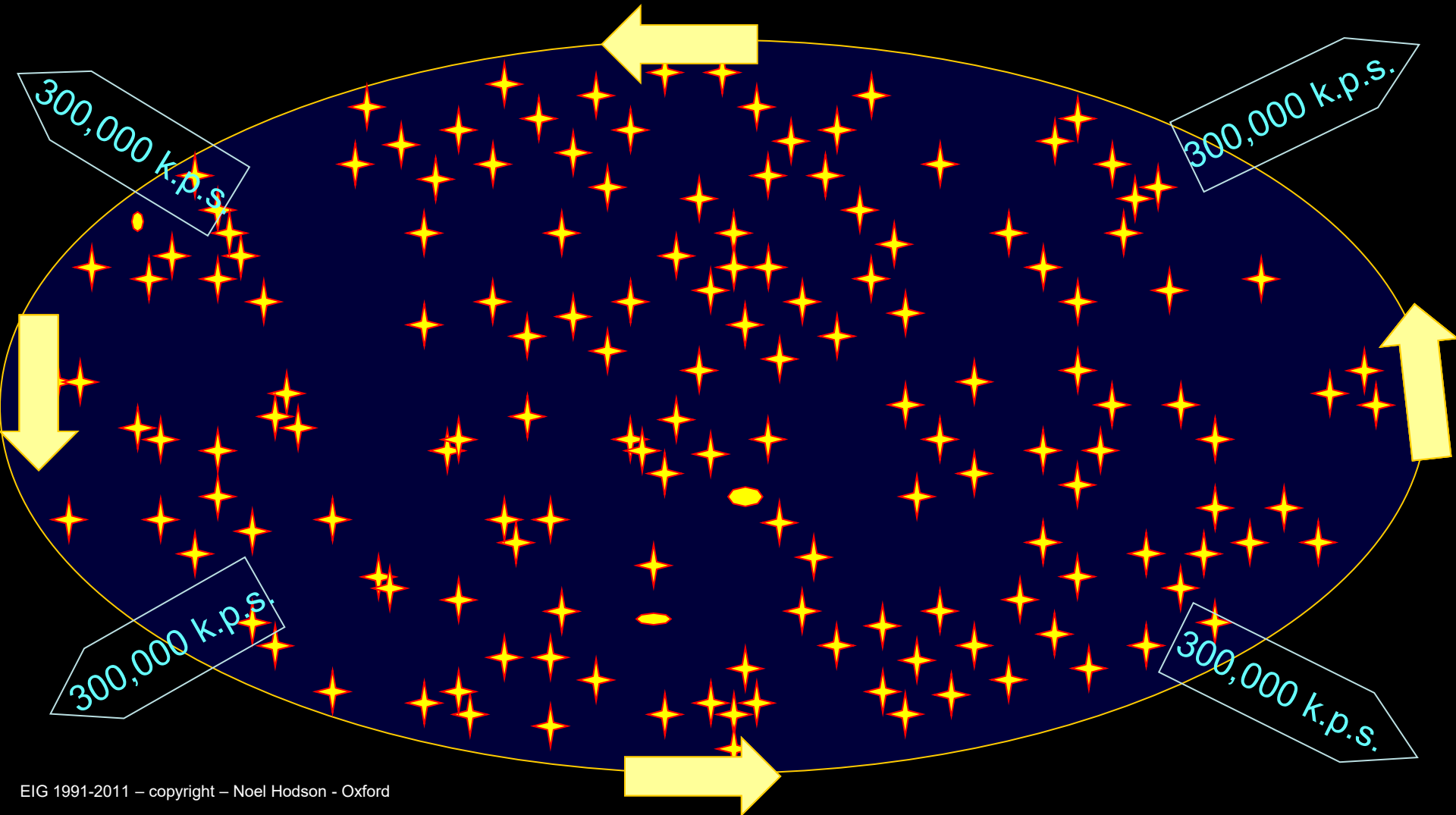
C is the usual symbol for light-speed 300,000 km a second.

EIG 13 of 23 The Universe – One Turn

The primordial fractals spin. Initially chaotic, the fractals align. Their spinning surfaces repel each other while their surface partial-vacuums attract. This dynamic is the underlying **Inertia** of the universe. Hubble expansion continues.



The spinning fractals are identifiable but not separate from the field, in which they exist. They are both of the field and are particles. Everything revolves, at diverse rates.



**Empty space does not exist.
Space-Time is not No-thing, it is Some-thing.**

**It is the energy-field.
The spinning fractals are continuously created by
collisions of light,
filling the evacuation (partial vacuums)
caused by expansion.**

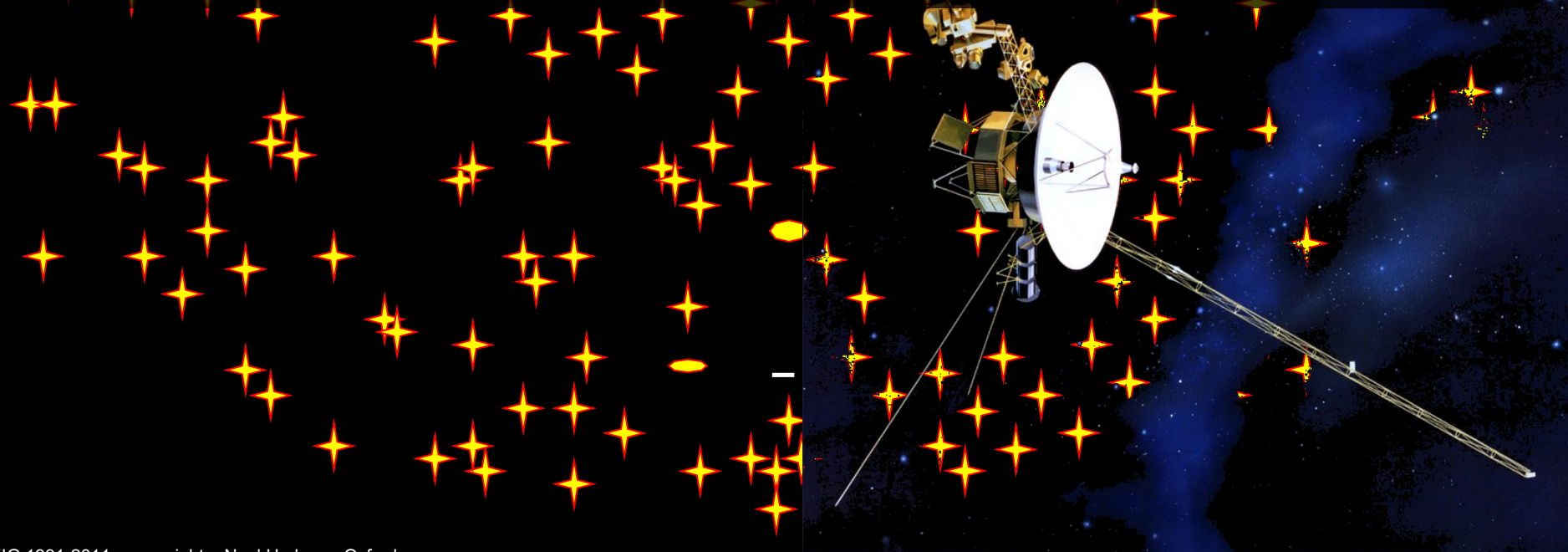
**Unless they join with others to form particles,
the invisible fractals unwind and merge with universal energy.**

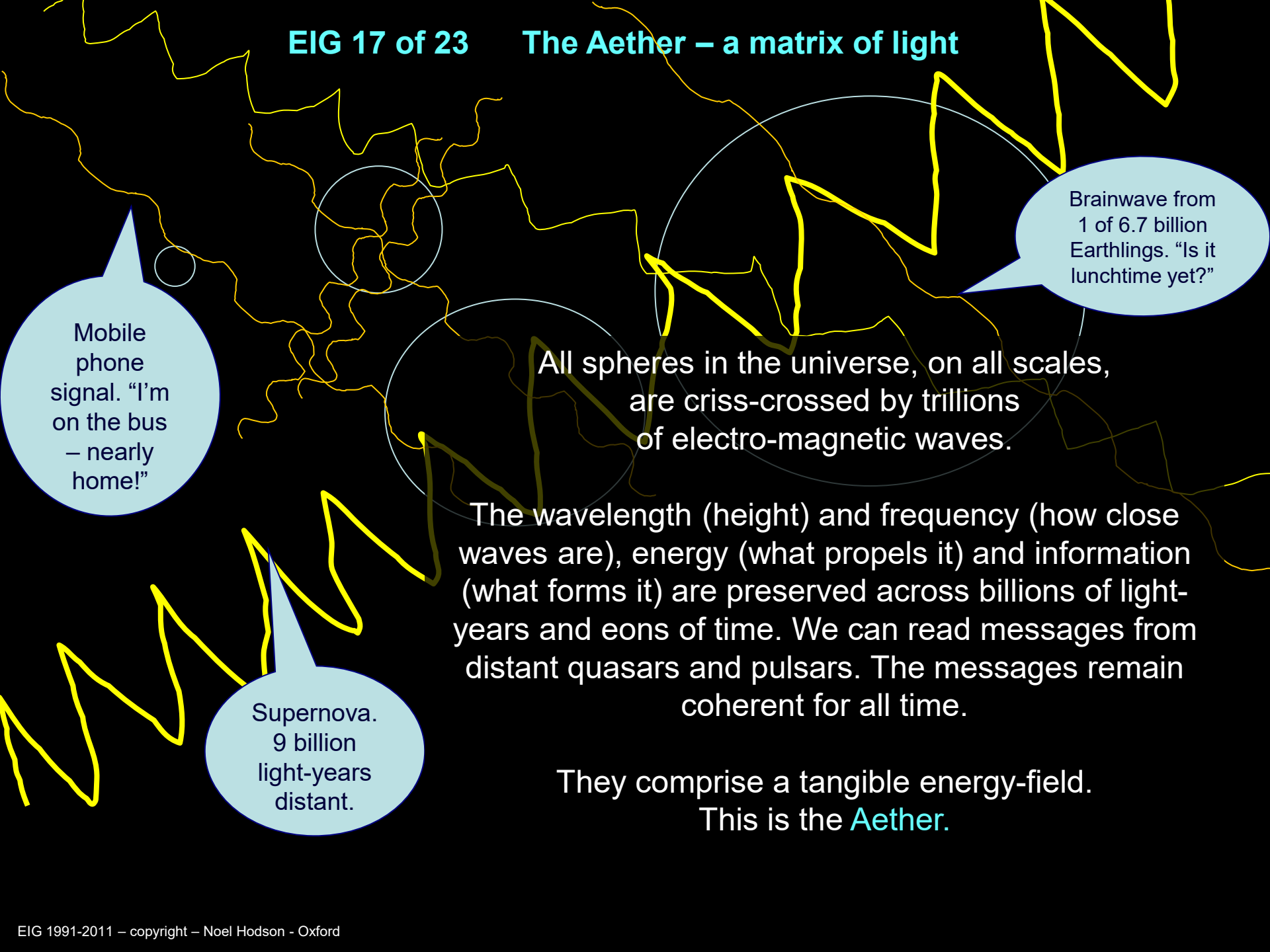
EIG 16 of 23 “Empty” Space – The Aether

“Empty” space does not exist. Place an eye anywhere in the universe and it sees the whole universe – slightly but uniquely different from each location – except wave-lengths too long to fit the observing orb.

Every sphere on every scale “sees” the entire universe, as each sphere is criss-crossed by electro-magnetic waves and particles from all phenomena.

The spheres constitute the universal Aether. How a signal retains it’s identity as it crosses the Aether, to our telescopes – is a scientific mystery. For example, the extremely weak radio signals from 30 years old Voyager 1 & 2, now leaving our solar-system.





Mobile phone signal. "I'm on the bus – nearly home!"

Supernova.
9 billion
light-years
distant.

Brainwave from
1 of 6.7 billion
Earthlings. "Is it
lunchtime yet?"

All spheres in the universe, on all scales, are criss-crossed by trillions of electro-magnetic waves.

The wavelength (height) and frequency (how close waves are), energy (what propels it) and information (what forms it) are preserved across billions of light-years and eons of time. We can read messages from distant quasars and pulsars. The messages remain coherent for all time.

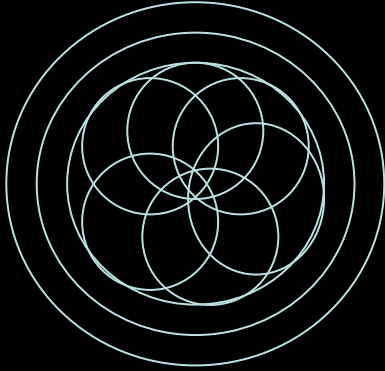
They comprise a tangible energy-field.
This is the **Aether**.

Wherever an eye or observer is located in space-time, it sees the whole universe. With precise instruments, every signal from every mobile phone is legible. Human brains emit more powerful signals than do mobile phones. An observing sphere will not detect wavelengths wider than its diameter.

The signals criss-cross to form an electro-magnetic matrix – the matrix is the Aether – the stuff of the universe, which is informed and reformed each moment by every signal.



EIG 19 of 23 Casimir's Glue – and Complex Expansion



(The vacuum arithmetic is complex. Reducing it to just one expanding sphere:- it's attenuation draws energy from it's surrounding larger sphere, which being larger, attenuates less:- drawing Energy from it's surrounding sphere etc. The attenuation or vacuum force diminishes with distance – meanwhile, internal small spheres are expanding.)

Every sphere contains an image (light waves) of the whole universe.
Every smaller sphere within larger spheres “sees” the same image.
Every larger sphere surrounding the spheres sees the same image.
All the images/holograms are slightly differently angled and accommodate different wavelengths – each is unique. The largest sphere is the universe.

Minuscule spheres cannot contain large wavelengths – there is more light-pressure outside smaller spheres than inside (Casimir).
This “Casimir-Glue” also underpins universal **Inertia** (see slide 13).

The sphere's expand at the Hubble Rate, which EIG calculates as $6.819\text{E-}19$ percent per second.
(i.e. circumference of the observable universe disappearing at light-speed).

Hubble Expansion attenuates the Aether or Energy Field.

Beyond price – the most complex thing in the known universe

We search for alien life – and hope aliens will be at least as intelligent as we are.

We highly value the complex human brain; an astonishing product of the **Life-Force**.



We try to find or manufacture super-intelligence, but only the human brain, with its 10^{11} neurons and 10^{14} synapses, - as Douglas Adams tells us -

...can make a decent cup of tea.

The organising **LIFE-FORCE** – the dynamic patterns of all phenomena – is a primary, self-evident, ubiquitous, physical, universal force, which ranks with Gravity, the Electromagnetic, Weak & Strong Nuclear forces; not as a second-tier product of those 4 forces. It might become possible to rank and relate these 5 forces using the concepts in these slides.



Infinite Implicate Dimensions.

Looking back:- Your mother carried you as a seed, from the time of her birth until your birth. Her mother, your grandmother, carried your mother as a seed. Her mother, your great-grandmother, carried your grandmother as a seed. This is scientific fact; implicit in the Long Body, back to the first life forms. Our body patterns come from inherited DNA - modified by the ever-changing electro-magnetic field of the Aether.

Do these enfolded multi-dimensions - a seed within a seed within a seed – emerge in the Many-Universes and String-Theory calculations?

Looking forwards:- Where next might your implicit enfolded life-force be manifest? Can instruments track your energy when you quit your present form? Will another seed or energy-field accommodate you?

EIG 22 of 23 Perpetual Presence – Informing the Universe

Creatures of Light : People are electrical generators of 10 to 75 watts (1AA battery = 5 watts).



Every motion creates a magnetic field – which creates an electric current, ad infinitum. These waves broadcast into the Aether - every thought and action. We all broadcast and receive all these signals at all times.

Your electro-magnetic record is perpetual. It in-forms and re-forms the Aether. We are matter and light waves. Like the photons that make us – People are Wavicles.

All phenomena broadcast. The more integrated the source – the stronger the signals; which do not die and, like star-light from the edges of the observable universe, they retain identity.

(NB – power of coherent intelligent groups; *Simile: harmonious choirs*).



EIG 23 of 24 LIFE-FORCE AND THE AETHER-MATRIX IN CONCLUSION.

It seems inarguable (to me) that space-time is a matrix of light in a holographic universe. The Aether-Matrix is continuously informed and reformed by all changes in all phenomena, by legible, broadcast electro-magnetic signals.

We do not know where the coherent patterns of phenomenal existence reside, which govern the growth of galaxies, seeds and DNA. It is probable, that such fundamental, universal patterns are held and recorded in the Aether-Matrix.

Living creatures and all dynamic things broadcast signals, which in-form and re-form the Aether-Matrix. If so, then the material universe, embedded in the energetic universe, alters the patterns of energy, which in turn produce phenomena – and humans – from those energy patterns. We may indeed reap what we sow.

We exist in a dynamic feed-back system of patterned energy, which our thoughts and actions change and which in turn changes us, instantaneously and continually. Our personal broadcasts persist in the Aether-Matrix “Until the end of Days.”

END

The details behind these scientifically heretical speculations are at
http://www.noelhodson.com/index_files/universal_model_v7_nov02.htm
Email: noel@noelhodson.com

Life, The Universe, Time & Everything

LIFEFORCE : The universe is intelligent. The instinctive, inherent intelligence of man, animals, and flora and fauna, arises from the interactions of energy, quarks, elements and all the chemicals. These fundamentals, forged in the furnaces of stars, co-operate to provide nurturing environments for delicate life. They act intelligently.

Some intelligent creatures might even decide to act reasonably.

Others might argue that building a cairn of rocks, with millions of rocks, will ultimately, miraculously become a living intelligent creature: is it placing rock



number 50,666,777 that switches on the lifeforce? Probably not.

The LIFEFORCE is an organising and integrating force that counter-balances the disintegrating effect of the [3rd Law of Thermodynamics](#). It confers cyclicity – even to Black Holes. How it (life - organisms) arises is not known, but there are probably clues in [Chaos Theory](#). Does this organising force exist in organisms? Ask a blade of grass; or a human brain.

(1) ELECTROMAGNETISM – (2) WEAK NUCLEAR – (3) STRONG NUCLEAR –
(4) GRAVITY – (5) TIME – (6) LIFEFORCE.

TIME – DARK ENERGY – DARK MATTER

From: Noel Hodson <noel@noelhodson.com> **Sent:** 21 November 2020 11:41 **To:** 'jlevin@barnard.edu' jlevin@barnard.edu **Subject:** Black Hole Survival Guide

21 NOV 2020 - Dear Professor Levin, A friend gave me your Black Hole Survival Guide. It elucidates some of the most profound cosmic mysteries. An excellent short summary, with excellent metaphors and similes to illustrate your concepts - and convey them relatively painlessly into my thick-skull.

You might care to add to your information and thinking, ideas that have occurred to me over the past 60 years. See this link. Friday, 23 October 2020 [GRAVITY ETC. - RECAP OCT 20](#)

It is probable that all objects in the universe, including black-holes and ourselves, have an event horizon. Where these horizons meet wavicles are created that we name as particles. Thus, no object “sees” the reality of any other object. We “see” and exchange in-form-ation at the event horizons. These horizons are spheres emanating from the “real” object at the core within. When we humans (our spheres) observe or react with a particle/wavicle on the surface of another sphere - it affects the entire sphere and thus all particles on the sphere; action at a distance.
Best wishes - (Mr) Noel Hodson



Everything we “see” in the universe is in the past. Whether it is 1 metre or 1 million light years away, its light takes time to reach us. The distance between it and us is filled with broadcast spheres of quantized propagating light. The space between is not empty. It is always full. Go halfway to the Sun and its light-waves will strike you in what we had thought to be empty-space. The broadcasts are dark-matter. Their expanding propagation is dark-energy. If the spheres, the event-horizons, stop broadcasting then the object disappears. It ceases to exist (stand-out). The history of the waves, over Time, is real energy. History has mass. Time is dark-matter.

GRAVITY – WHAT IT IS; NOT WHAT IT DOES



19 [NEW GRAVITY -SUMMARY](#)

[Link](#)

Gravity is the relative absence or reduction of the pressure of the radiation that fills the universal ocean of radiation, which is from 13.7 to 43.7 billion-light-years deep. Contemplate "The ever tightening knot of gravity, ultimately resulting in black-holes" and "Counter-intuitively, the centre of the Sun is very dark" because the centre is most "shaded" or protected from or excludes the universal radiation. (NB between masses as per Casimir). The external radiation is the PUSH and the internal partial absence of radiation is the PULL of gravity. *NCH March 2015*

This idea depends on light having some mass or pressure (it does) and the [Dutch physicist, Casimir](#). He demonstrated that between (inside) close objects large /long wavelengths cannot manifest so the full complement of (outside) wavelengths push the objects together. Tall sided ships at sea are similarly pushed together. If light has mass, ideas of curved space need to be revised.

[Photon energy](#) - Wikipedia

"However, the claim that photons are massless is based on the crisis arising with other theories in quantum mechanics. In order for other math, such as gauge invariance and so-called "renormalization" to survive without considerable revision, photons must be kept massless in the realm of current equations. ^[1] The claim is also contested by other circles."

(Maxwell: 0.0000047 Newtons (1 Newton = 102 gm) spread over one square-metre)

[Pressure of sunlight \(Maxwell-Bartoli\)](#) is 0.4 mg on a black surface and 0.8 mg on a mirror.

DETAILED WORK: [Link here and follow the Gravity tag.](#) Monday, 9 March 2015 [GRAVITY - A NEW THEORY](#)

Sources and resources:

New Scientist Issues 1 to 3312 – Scientific American 1958 to 1992 – University of Oxford Dept for Continuing Education, Particle & Astrophysics, Tutor David Chapple, Jan 2010 to Jan 2014. – BOOKS : Gravity, Brian Glegg – Nothing, New Scientist – Newton Never at Rest, Richard S Westfall – Paradoxes of Time Travel, Ryan Wasserman – Lightspeed, John C.H. Spence – Electric Universe, David Bodanis – The Quark and the Jaguar, Murray Gell-Mann – The Science Delusion, Rupert Sheldrake – The Ascent Of Gravity, Marcus Chown – The Order of Time, Carlo Rovelli – Seven Brief Lessons on Physics, Carlo Rovelli – Supersymmetry (Superposition), David Walton – Infinity in the palm of your hand, Marcus Chown – The Theory of Relativity: and other essays, Albert Einstein – The Quantum World, NS – QED, Richard Feynman – Elementary Particles and the Laws of Physics, Richard P Feynman – The speed of mass, Philip J Morgan – Everything is Physics, Andrew Worsley – What we cannot know: Marcus du Sautoy – Douglas Adams – The Great Mathematicians, Raymond Flood, Robin Wilson – The Stuff of the Universe, John Gribben & Martin Rees – The Scientific Exploration of Mars, Frederic W. Taylor – Schrodinger's Kittens and the search for reality, John Gribbin – The Number Mysteries, Marcus du Sautoy – Chaos, James Gleick – The Tao of Physics, Fritjof Capra – The God Delusion, Richard Dawkins – About Time, Einstein's unfinished revolution, Paul Davies, - Einstein's Cosmos, Michio Kaku – The Music of the Primes, Marcus du Sautoy – Leonardo The First Scientist, Michael White – The Diversity of Life, Edward O Wilson – The Ghost in the Atom, PCW Davies & JR Brown – The Elegant Universe, Brian Greene – The Science of Genetics, Charlotte Auerbach – Richard Feynman and modern physics, James Gleick – Modern Science Writing, Richard Dawkins – The Dreams that Stuff is Made Of, Stephen Hawking – Inside the Centre, Oppenheimer, by Ray Monk – The Code Book, Simon Singh – Isaac Newton, James Gleick – The Void, Frank Close – INNUMERACY, John Allen Paulos – Einstein, Banesh Hoffman & Helen Dukas – What do you care what other people think? , Richard Feynman – The Dancing Wu Li Masters, Gary Zukav – Sustainable Energy without the hot air, David JC MacKay – The Goldilocks Enigma, Paul Davies – The Joy of Pi, David Blatner – Five Equations that changed the world, Michael Guillen – The Case of the Missing Neutrino, John Gribbin – Constructing Reality, John Marburger – Astronomy, Fred Hoyle – Viruses from Space, Fred Hoyle & Chandra Wikramahsingh & John Watkins – ASIMOV Guide to Science – Einstein for Beginners, Joseph Schwartz & Michael McGuinness – Before the Beginning, on Stephen Hawking by Martin Rees - A natural history of zero, Robert Kaplan – Catching the Light, Arthur Zajonc – In Search of Schrodinger's Cat, John Gribbin – QED The strange theory of light and matter, Richard P. Feynman – The End of Time, Julian Babour – The Last Three Minutes, Paul Davies – The Quantum Society, Danah Zohar & Ian Marshall – The Cosmic Blueprint, Paul Davies – The Trouble with Physics, Lee Smolin – The Astonishing Hypothesis, Francis Crick – The Birth of Time, John Gribbin – In Search of the Edge of Time, John Gribbin – Six Easy Lesson & Six Not so Easy Lessons, Feynman - A brief History of Time, and A Life in Science, Stephen Hawking – Lectures at The Royal Society. [Collected Works of Eugene Halliday](#) – Contact: noel@noelhodson.com