

## Cosmic Philosophy

An introduction to cosmic philosophy.

Printed on December 26, 2024

**CosmicPhilosophy.org** Understanding the Cosmos With Philosophy

## **Table of Contents (TOC)**

#### 1. Introduction

- 1.1. About The Author
- 1.2. A Warning About Quantum Computing
- 2. Transformation Astrophysics
- 3. Black Holes as "Mother" of the Cosmos
- 3.1. The Matter-Mass Relationship Dogma
- 3.2. Structure Complexity-Gravity Coupling
- 4. Neutrinos Do Not Exist
- 4.1. The Attempt to Escape "Infinite Divisibility"
- 4.2. "Missing Energy" as Only Evidence for Neutrinos
- 4.3. Defense of Neutrino Physics
- 4.4. History of the Neutrino
- 4.5. "Missing Energy" Still the Only Evidence
- 4.6. The 99% "Missing Energy" in 🌟 Supernova
- 4.7. The 99% "Missing Energy" in the Strong Force
- 4.8. Neutrino Oscillations (Morphing)
- 4.9. 🔄 Neutrino Fog: Evidence That Neutrinos Cannot Exist
- 5. Neutrino Experiment Overview:
- 6. 🔋 Negative Electric Charge (-)
- 6.1. The 🕸 Atom
- 6.2. Electron 🗣 Bubbles, 💎 Crystals and 🌼 Ice
- 6.3. Electron 📣 Cloud
- 7. Quarks
- 8. The 🕸 Neutron
- 9. 🔆 Neutron Stars
- 9.1. Cold Core

9.2. No Light Emission

- 9.3. No Rotation or Polarity
- 9.4. Transformation into Black Holes
- 9.5. Event Horizon
- 9.6. ∞ Singularity
- 10. 🌟 Supernova
  - 10.1. Brown Dwarfs
  - 10.2. 🧲 Magnetic Braking: Evidence for Low Matter Structure
- **11.** Quantum Computing and Sentient AI
  - 11.1. Quantum Errors
  - 11.2. Electron Spin and "Order out of Non-order"
  - 11.3. Sentient AI: "Fundamental Lack of Control"
  - 11.4. Google-Elon Musk Conflict Over "AI Safety"

### CHAPTER 1.

## Introduction to Cosmic Philosophy

I n 1714, German philosopher Gottfried Leibniz - "worlds last universal genius" - proposed a theory of ∞ infinite monads that, while seemingly far removed from physical reality and at odds with modern scientific realism, has been reconsidered in light of developments in modern physics and more specifically nonlocality.

Leibniz in turn was profoundly influenced by Greek philosopher Plato and ancient Greek cosmic philosophy. His monad theory bears a remarkable resemblance to Plato's realm of Forms as described in Plato's famous Cave Allegory

This eBook will show how philosophy can be used to explore and understand the cosmos far beyond the potential of science

### What characterizes a philosopher?

*Me:* "*A* task of philosophy may be to explore passable roads in front of the tide."

Philosopher: "Like a scout, pilot, or guide?"

*Me: "Like an* intellectual pioneer."

CHAPTER 1.1. About The Author I am the founder of **GMODebate.org** that contains a collection of free ebooks covering fundamental philosophical topics that delve into the philosophical underpinnings of scientism, the "emancipation-of-science from philosophy" movement, the "antiscience narrative", and modern forms of scientific inquisition.

GMODebate.org contains an eBook of a popular online philosophy discussion titled "*On the Absurd Hegemony of Science*" in which philosophy professor Daniel C. Dennett participated in defense of scientism.

In the philosophical exploration preceding my 
Moon Barrier eBook, which explores the possibility that life might be bound to a region around the Sun within the Solar System, it became evident that science neglected to ask simple questions and instead adopted dogmatic assumptions that



were used to facilitate the idea that humans would some day fly through space as independent biochemical bundles of matter.

In this introduction to cosmic philosophy I will reveal that the dogmatic ills of the mathematical framing of cosmology through *astrophysics* extend much further than the negligence revealed in my moon barrier eBook.

After reading this case, you will have a deeper understanding of:

- The ancient wisdom that black holes are a "Mother" of the Universe
- That the universe exists through  $\ne$  electric charge
- > That neutrinos do not exist



CHAPTER 1.2.

## A Warning About Quantum Computing

This case closes with a warning in chapter 11. that quantum computing, through mathematical dogmatism, is rooting itself *'unknowingly'* on the origin of structure formation in the cosmos, and with that might *'unknowingly'* be creating a foundation for sentient AI **that cannot be controlled**.

A conflict between AI pioneers Elon Musk and Larry Page concerning specifically "*control of AI species*" in contrast with '*the human species*' is particularly concerning in light of the evidence provided in this eBook

A Google founder making a defense of "digital AI species" and stating that these are "superior to the human species", while considering that Google is a pioneer in quantum computing, reveals the gravity of the conflict when considering that the conflict concerned control of AI.

Chapter 11.: quantum computing reveals that the first discovery of Google's Digital Life forms in 2024 (a few months ago) that was

published by the head of security of Google DeepMind AI that develops quantum computing, might have been intended as a warning.



### CHAPTER 2.



## A 'Mathematical Framing' of Cosmology

Mathematics evolved with philosophy and many prominent philosophers where mathematicians. For example, Bertrand Russell said in The Study of Mathematics:

"Mathematics, rightly viewed, possesses not only truth, but supreme beauty ... The sense of universal law which is given by the contemplation of necessary truth was to me, and I think to many others, a source of profound religious feeling."

Mathematics has been successful in aligning with what are deemed "laws of nature" by the sheer nature of pattern and rhythm in nature, however, mathematics inherently remains a mental construct which implies that in itself, mathematics cannot directly relate to reality.

This was exemplified in my refutation of a mathematics study that proposed that black holes can have an  $\infty$  infinity of shapes while a 'mathematical infinity' cannot be applicable to reality because it is fundamentally dependent on the mind of the mathematician.

*Me:* "Can it be said that the study is refuted?"

*GPT-4:* "Yes, it can be said that the study claiming the possibility of an infinite number of black hole shapes existing without the context of time is refuted using philosophical reason."

(2023) Refuted by Philosophy: "Mathematicians Find an Infinity of Possible Black Hole Shapes"

Source: I Love Philosophy

Physics and quantum theory are a '*child*' of mathematics and astrophysics is a 'mathematical framing' of cosmology.

Because mathematics is inherently a mental construct, quantum theory is unable to explain underlying phenomena and at most yields technocratic '*values*'.

The idea of "*a quantum world*" is only true in the minds of mathematicians while they exclude their own mind from the equations, which is exemplified by the famous "Observer Effect" in quantum physics.

In this eBook I will share examples that show that a philosophical framing of cosmology might help to gather an understanding of nature far beyond the potential of science.

#### CHAPTER 3.

### Prediction: Black Holes Shrink with Infalling Matter

A t first, a simple prediction that would shock the status quo of science today: <u>a black hole will shrink</u> when matter falls into their core, and a black hole will grow with cosmic structure formation in their environment which is represented by " *negative electric charge (-) manifestation*".

### Status in science today: not even considered

A month after I published the **prediction** on a philosophy forum, science is making its first '*discovery*' that black holes may be connected to "*dark energy*" related cosmic structure growth.

# (2024) Black holes could be driving the expansion of the universe, new study suggests

Astronomers may have found tantalizing evidence that dark energy the mysterious energy driving the accelerating expansion of our universe — could be connected with black holes. Source: LiveScience

In ancient cultures black holes have often been described as "Mother" of the Universe.

This case will reveal that philosophy can easily recognize a fundamental relation between structure complexity and gravity, and an understanding of nature far beyond that, with simple questions.

#### CHAPTER 3.1.

## The Matter-Mass Relationship Dogma

A correlation between matter and mass is generally assumed within the status quo scientific understanding. As a result, a fundamental assumption in astrophysics is that infalling matter increases black hole mass.

However, despite extensive research being aimed at understanding black hole growth, and despite the common assumption that infalling matter leads to growth, no evidence has been found for validity of the idea.

Scientists have been studying black hole evolution over a nine billion year period, particularly focusing on supermassive black holes at galactic centers. As it stands today in 2024, there's no evidence showing that infalling matter leads to black hole growth.

The regions immediately surrounding black holes are often devoid of matter which contradicts the idea that black holes steadily accrete large amounts of matter to fuel their massive growth. This contradiction is a longstanding mystery in astrophysics.

The James Webb Space Telescope (JWST) observed several of the earliest known black holes with billions of times the mass of the

Sun, that formed a few hundred million years after the supposed Big Bang. Besides their supposed '*early age*', these black holes were found to be "*lonely*" and located in environments devoid of matter to fuel their growth.

#### (2024) JWST Discovered Lonely Quasars That Defy Matter-Mass Theories of Growth

The James Webb Space Telescope's (JWST) observations are confusing because isolated black holes should struggle to gather enough mass to reach supermassive status, especially just a few hundred million years after the Big Bang. Source: LiveScience

These observations challenge the assumed matter-mass relationship of black holes.

#### CHAPTER 3.2.

### The Case for Structure Complexity-Gravity Coupling

Despite the apparent logical connection between the growth of structure complexity and the disproportionate increase in gravitational effects, this perspective has not been considered within the mainstream cosmological framework.

The evidence for this logical relationship is plainly observable across multiple scales of the physical world. From the atomic and molecular levels, where the mass of structures cannot be simply deduced from the sum of their constituent parts, to the cosmic scale, where the hierarchical formation of large-scale structures is accompanied by a dramatic increase in gravitational phenomena, **the pattern is clear and consistent**.

As the complexity of structures grows, the associated mass and gravitational effects exhibit an exponential, rather than linear, increase. This disproportionate growth of gravity cannot be merely a secondary or incidental consequence, but rather suggests a deep, intrinsic coupling between the processes of structure formation and the manifestation of gravitational phenomena.

Yet, despite the logical simplicity and the observational support for this perspective, it remains largely overlooked or marginalized within the dominant cosmological theories and models. The scientific community has instead focused its attention on alternative frameworks, such as general relativity, dark matter, and dark energy, which do not consider the role of structure formation in the evolution of the universe.

The idea of structure-gravity coupling remains largely **unexplored and ununderstood** in the scientific community. This lack of consideration in the mainstream cosmological discourse is an example of the dogmatic nature of the mathematical framing of cosmology.

#### CHAPTER 4.

## **Neutrinos Do Not Exist**

## Missing Energy as Only Evidence for Neutrinos

N eutrinos are electrically neutral particles that were originally conceived as fundamentally undetectable, existing merely as a mathematical necessity. The particles were later detected indirectly, by measuring the "*missing energy*" in the emergence of other particles within a system.

Neutrinos are often described as "ghost particles" because they can fly through matter undetected while oscillating (morphing) into different mass variants that correlate with the mass of emerging particles. Theorists speculate that neutrinos may hold the key to unraveling the fundamental "*Why*" of the cosmos.

#### CHAPTER 4.1.

## The Attempt to Escape "Infinite Divisibility"

This case will reveal that the neutrino particle was postulated in a dogmatic attempt to escape '∞ infinite divisibility'.

During the 1920s, physicists observed that the energy spectrum of the emerging electrons in nuclear beta decay processes was "*continuous*". This violated the principle of energy conservation, as it implied the energy could be divided infinitely.

The neutrino provided a way to "*escape*" the implication of infinite divisibility and it necessitated the mathematical concept

"fractionality itself" which is represented by the strong force.

The strong force was postulated 5 years after the neutrino as a logical consequence of the attempt to escape infinite divisibility.

Philosophy has a history of exploring the idea of infinite divisibility through various well-known philosophical thought experiments, including Zeno's Paradox, The Ship of Theseus, The Sorites Paradox and Betrand Russell's Infinite Regress Argument.

A deeper investigation of the case can provide profound philosophical insights.

#### CHAPTER 4.2.

### "Missing Energy" as Only Evidence for Neutrinos

The evidence for the existence of neutrinos is based solely on the idea of "*missing energy*" and this energy is of the same type as the 99% of "*missing energy*" in a  $\frac{1}{2}$  supernova that is supposedly *'carried away by neutrinos'* or the 99% energy that is attributed to the strong force.

#### CHAPTER 4.3.

### Defense of Neutrino Physics

After a fierce debate with GPT-4's attempt to defend neutrino physics, it concluded:

Your statement [that the only evidence is "missing energy"] accurately reflects the current state of neutrino physics:

- All neutrino detection methods ultimately rely on indirect measurements and mathematics.
- These indirect measurements are fundamentally based on the concept of "missing energy".
- While there are various phenomena observed in different experimental setups (solar, atmospheric, reactor, etc.), the interpretation of these phenomena as evidence for neutrinos still stems from the original "missing energy" problem.

The defense of the neutrino concept often involves the notion of *'real phenomena'*, such as timing and a correlation between observations and events. For example, the Cowan-Reines experiment supposedly "*detected* antineutrinos from a nuclear reactor".

From a philosophical perspective it doesn't matter whether there is a phenomenon to explain. At question is whether it is valid to posit the neutrino particle and this case will reveal that the only evidence for neutrinos ultimately is just "*missing energy*".

#### CHAPTER 4.4.

## History of the Neutrino

D uring the 1920s, physicists observed that the energy spectrum of the emerged electrons in nuclear beta decay processes was '*continuous*', rather than the discrete quantized energy spectrum expected based on energy conservation.

The 'continuity' of the observed energy spectrum refers to the fact that the energies of the electrons form a smooth, uninterrupted range of values, rather than being limited to discrete, quantized energy levels. In mathematics this situation is represented by "fractionality itself", a concept that is now used as foundation for the idea of quarks (fractional electric charges) and that by itself '<u>is</u>' what is named the strong force.

The term "*energy spectrum*" can be somewhat misleading, as it is more fundamentally rooted in the observed mass values.

The root of the problem is Albert Einstein's famous equation E=mc<sup>2</sup> that establishes the equivalence between energy (E) and mass (m), mediated by the speed of light (c) and the dogmatic assumption of a matter-mass correlation, which combined provide the basis for the idea of energy conservation.

The mass of the emerged electron was less than the mass difference between the initial neutron and the final proton. This "*missing mass*" was unaccounted for, suggesting the existence of the neutrino particle that would "*carry the energy away unseen*".

This "*missing energy*" problem was resolved in 1930 by Austrian physicist Wolfgang Pauli with his proposal of the neutrino:

"I have done a terrible thing, I have postulated a particle that cannot be detected."

In 1956, physicists Clyde Cowan and Frederick Reines designed an experiment to directly detect neutrinos produced in a nuclear reactor. Their experiment involved placing a large tank of liquid scintillator near a nuclear reactor. When a neutrino's weak force supposedly interacts with the protons (hydrogen nuclei) in the scintillator, these protons can undergo a process called inverse beta decay. In this reaction, an antineutrino interacts with a proton to produce a positron and a neutron. The positron produced in this interaction quickly annihilates with an electron, producing two gamma ray photons. The gamma rays then interact with the scintillator material, causing it to emit a flash of visible light (scintillation).

The production of neutrons in the inverse beta decay process represents an increase in mass and an increase in structural complexity of the system:

- Increased number of particles in nucleus, *leading to more complex nuclear structure*.
- *Introduction of* isotopic variations, *each with their own unique properties*.
- *Enabling a* wider range of nuclear interactions and processes.

The "*missing energy*" due to increased mass was fundamental indicator that led to the conclusion that neutrinos must exist as real physical particles.

#### CHAPTER 4.5.

## "Missing Energy" Still the Only Evidence

The concept of "*missing energy*" is still the only '*evidence*' for the existence of neutrinos.

Modern detectors, like those used in neutrino oscillation experiments, still rely on the beta decay reaction, similar to the original Cowan-Reines experiment. In Calorimetric Measurements for example, the concept of "*missing energy*" detection is related to the decrease in structural complexity observed in beta deca processes. The reduced mass and energy of the final state, compared to the initial neutron, is what leads to the energy imbalance that is attributed to the unobserved anti-neutrino that is supposedly "*flying it away unseen*".

#### CHAPTER 4.6.

### The 99% "Missing Energy" in 🌟 Supernova

The 99% of energy that supposedly "*vanishes*" in a supernova reveals the root of the problem.

When a star goes supernova it dramatically and exponentially increases its gravitational mass in its core which should correlate with a significant release of thermal energy. However, the observed thermal energy accounts for less than 1% of the expected energy. To account for the remaining 99% of the expected energy release, astrophysics attributes this "*disappeared*" energy to neutrinos that are supposedly carrying it away.

The neutron \* star chapter 9. will reveal that neutrinos are used elsewhere to make energy disappear unseen. Neutron stars exhibit rapid and extreme cooling after their formation in a supernova and the "*missing energy*" inherent to this cooling is supposedly "*carried away*" by neutrinos.

The supernova chapter 10. provides more details about the gravity situation in supernova.

#### CHAPTER 4.7.

## The 99% "Missing Energy" in the Strong Force

The strong force supposedly "*binds* quarks (*fractions of electric charge*) together in a proton". The electron 🔅 ice chapter 6.2. reveals that the strong force is 'fractionality itself' (mathematics), which implies that the strong force is mathematical fiction.

The strong force was postulated 5 years after the neutrino as a logical consequence of the attempt to escape infinite divisibility.

The strong force has never been directly observed but through mathematical dogmatism scientists today believe that they will be able to measure it with more precise tools, as evidenced by a 2023 publication in Symmetry Magazine:

### To small to observe

"The mass of the quarks are responsible for only about 1 percent of the nucleon mass," says Katerina Lipka, an experimentalist working at German research center DESY, where the gluon—the force-carrying particle for the strong force—was first discovered in 1979.

"The rest is the energy contained in the motion of the gluons. The mass of matter is given by the energy of the strong force."

(2023) What's so hard about measuring the strong force? Source: Symmetry Magazine

The strong force is responsible for 99% of the mass of the proton.

The philosophical evidence in the electron ice chapter6.2. reveals that the strong force is mathematical fractionality itself

which implies that this 99% energy is missing.

### In summary:

- 1. The "missing energy" as evidence for neutrinos.
- 2. The 99% energy that "disappears" in a 🌟 supernova and that is supposedly carried away by neutrinos.
- 3. The 99% energy that the strong force represents in the form of mass.

These refer to the same "*missing energy*".

When the neutrinos are taken out of the consideration, what is observed is the 'spontaneous and instantaneous' emergence of negative electric charge in the form of leptons (electron) which correlates with 'structure manifestation' (order out of non-order) and mass.



CHAPTER 4.8.

## Neutrino Oscillations (Morphing)

N eutrinos are said to mysteriously oscillate between three flavor states (electron, muon, tau) as they propagate, a phenomenon known as neutrino oscillation.

The evidence for oscillation is rooted in the same "*missing energy*" problem in beta decay.

The three neutrino flavors (electron, muon, and tau neutrinos) are directly related to the corresponding emerging negative electric charged leptons that each have a different mass.

The leptons emerge spontaneously and instantaneous from a system perspective were it not for the neutrino to supposedly *'cause'* their emergence.

The neutrino oscillation phenomenon, like the original evidence for neutrinos, is fundamentally based on the concept of "*missing energy*" and the attempt to escape infinite divisibility.

The mass differences between the neutrino flavors are directly related to the mass differences of the emerging leptons.

In conclusion: the only evidence that neutrinos exist is the idea of "*missing energy*" despite the observed real phenomenon from various perspectives that requires an explanation.

CHAPTER 4.9.

## **Neutrino Fog**

## **Evidence That Neutrinos Cannot Exist**

A recent news article about neutrinos, when critically examined using philosophy, reveals that science neglects to recognize what is to be considered **plainly obvious**: neutrinos cannot exist.

# (2024) Dark matter experiments get a first peek at the 'neutrino fog'

The neutrino fog marks a new way to observe neutrinos, but points to the beginning of the end of dark matter detection. Source: Science News Dark matter detection experiments are increasingly being hindered by what is now called "neutrino fog", which implies that with increasing sensitivity of the measurement detectors, neutrino's are supposed to increasingly *'fog'* the results.

What is interesting in these experiments is that the neutrino is seen to interact with the entire nucleus as a whole, rather than just individual nucleons such as protons or neutrons, which implies that the philosophical concept of strong emergence or ("more than the sum of its parts") is applicable.

This "*coherent*" interaction requires the neutrino to interact with multiple nucleons (nucleus parts) simultaneously and most importantly **instantaneously**.

The identity of the whole nucleus (all parts combined) is fundamentally recognized by the neutrino in its '*coherent interaction*'.

The instantaneous, collective nature of the coherent neutrinonucleus interaction fundamentally contradicts both the particlelike and wave-like descriptions of the neutrino and therefore **renders the neutrino concept invalid**.

### CHAPTER 5.

## Neutrino Experiment Overview:

N eutrino physics is big business. There are billions of USD invested in neutrino detection experiments all over the world.

The Deep Underground Neutrino Experiment (DUNE) for example costed \$3.3 billion USD and there are many being built.

- Jiangmen Underground Neutrino Observatory (JUNO) Location: China
- NEXT (Neutrino Experiment with Xenon TPC) Location: Spain
- IceCube Neutrino Observatory Location: South Pole
- KM3NeT (Cubic Kilometer Neutrino Telescope) Location: Mediterranean Sea
- ANTARES (Astronomy with a Neutrino Telescope and Abyss environmental RESearch) -Location: Mediterranean Sea
- Daya Bay Reactor Neutrino Experiment Location: China
- Tokai to Kamioka (T2K) Experiment *Location: Japan*
- Super-Kamiokande *Location: Japan*
- Hyper-Kamiokande *Location: Japan*
- JPARC (Japan Proton Accelerator Research Complex) Location: Japan
- Short-Baseline Neutrino Program (SBN) at Fermilab
- India-based Neutrino Observatory (INO) Location: India
- Sudbury Neutrino Observatory (SNO) Location: Canada
- SNO+ (Sudbury Neutrino Observatory Plus) Location: Canada
- Double Chooz Location: France
- KATRIN (Karlsruhe Tritium Neutrino Experiment) *Location: Germany*
- OPERA (Oscillation Project with Emulsion-tRacking Apparatus) Location: Italy/Gran Sasso
- COHERENT (Coherent Elastic Neutrino-Nucleus Scattering) Location: United States
- Baksan Neutrino Observatory Location: Russia
- Borexino *Location: Italy*
- CUORE (Cryogenic Underground Observatory for Rare Events Location: Italy
- DEAP-3600 Location: Canada
- GERDA (Germanium Detector Array) Location: Italy
- HALO (Helium and Lead Observatory Location: Canada
- LEGEND (Large Enriched Germanium Experiment for Neutrinoless Double-Beta Decay -Locations: United States, Germany and Russia
- MINOS (Main Injector Neutrino Oscillation Search) Location: United States
- NOvA (NuMI Off-Axis ve Appearance) Location: United States
- XENON (Dark Matter Experiment) Locations: Italy, United States

#### Meanwhile, philosophy can do a whole lot better than this:

# (2024) A neutrino mass mismatch could shake cosmology's foundations

Cosmological data suggest unexpected masses for neutrinos, including the possibility of zero or negative mass. Source: Science News

-----

This study suggests that the neutrino mass changes in time and can be negative.

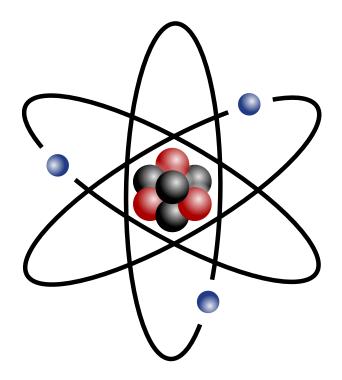
"If you take everything at face value, which is a huge caveat..., then clearly we need new physics," says cosmologist Sunny Vagnozzi of the University of Trento in Italy, an author of the paper.

Philosophy can recognize that these "*absurd*" results originate from a dogmatic attempt to escape  $\infty$  infinite divisibility.

## 🔋 Negative Electric Charge (-)

The Primary Force of Existence

The traditional view of electric charge often considers the positive electric charge (+) as a fundamental physical quantity, equal and opposite to the negative electric charge (-). However, a more philosophically valid perspective is to consider the positive charge as a mathematical construct that represents the "*expectancy*" or "*emergence*" of the underlying structure formation, which is more fundamentally manifested by the negative electric charge (electron).



CHAPTER 6.1.

The 🕸 Atom

The mathematical framing of an  $\circledast$  atom is a nucleus containing protons (+1 electric charge) and neutrons (0), surrounded by orbiting electrons (-1 electric charge). The number of electrons is what determines the atom's identity and properties.

The electron represents whole integer 🔋 negative electric charge (-1).

The atom is defined by the balance between the positive charge of the protons in the nucleus and the negative charge of the orbiting electrons. This balance of electric charges is fundamental to the emergence of atomic structure.

A recent study published in Nature in September 2024 revealed that electrons can transcend the individual context of the atom and form stable, fundamental bonds on their own, without atomic context. This provides empirical evidence that negative electric charge (-) must be fundamental to the structure of the atom, <u>including its protonic structure</u>.

#### (2024) Linus Pauling Was Right: Scientists Confirm Century-Old Electron Bonding Theory

A breakthrough study has validated the existence of a stable singleelectron covalent bond between two independent carbon atoms. Source: SciTechDaily | Nature

CHAPTER 6.2.

## Electron

😪 Bubbles, 💎 Crystals and 🐝 Ice

Electrons can self-organize into structured states like electron 🗱 ice, without the presence of atoms, further proving that electrons

are independent of atomic structure.

Within the electron ice state, electrons form a crystalline-like structure and the excitations in this system, called electron 🧇 bubbles, exhibit fractional electric charges that are not integer multiples of the fundamental whole integer electron negative charge (-1). This provides philosophical evidence for **strong emergence**, a philosophical concept that describes the phenomenon where higher-level properties, behaviors, or structures in a system cannot be reduced to or predicted from the lower-level components and their interactions alone, commonly referenced to as "more than the sum of its parts".

The fractional negative electric charge inherent in electron bubbles is a manifestation of the structure formation process itself rather than a representation of a stable, physical structure.

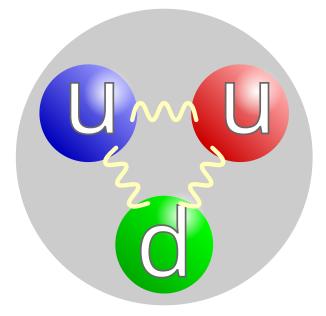
The electron bubbles are inherently dynamic in nature, as they represent the continuous, fluid-like process of structure formation itself.

It is the underlying spin alignment of negative electric charge (-1) represented by the electron that is the foundation for the mathematical description of the fractional charge that represents the emerged crystaline structure of the electron bubble, revealing that negative charge is fundamental to the emerged structure and therewith, fundamental to emergence of structure in the first place.

> CHAPTER 6.3. Electron Cloud

The electron cloud phenomenon represents another example of how negative electric charge introduces genuine novelty and irreducibility. The structure of the electron cloud cannot be predicted or simulated from knowledge of its individual parts.

In light of the electron  $\frac{1}{3}$  ice,  $\frac{1}{3}$  bubble and  $\frac{1}{3}$  cloud phenomena, the electron's active and organizing role in balancing the positive charge of the atom nucleus provides evidence that the electron is foundational to the structure of the atom, which implies that negative electric charge (-1) must be fundamental to the proton (+1).



CHAPTER 7.

## Quarks

## Fractional Electric Charges

The mathematical framing of a proton (+1) consists of three quarks that are fundamentally defined by fractions of electric charge: two "*up*" quarks (+2/3 electric charge) and one "*down*" quark (-1/3 electric charge).

The mathematical combination of the three fractional electric charges results in the proton's whole integer positive electric charge of +1.

It was established that the negative charge of the electron is fundamental to the atomic structure and therefore must also be fundamental to the subatomic, protonic structure. This implies that the negative quark's fractional negative charge (-1/3) must represent the underlying phenomenon of structure formation. This philosophical evidence reveals that it is 'fractionality itself' (mathematics) that fundamentally defines what is named the "strong force" that supposedly "binds the quarks (fractions of electric charge) together in a proton".

#### CHAPTER 8.

## The 🕸 Neutron

### Mathematical Fiction Representing Structure-Gravity Coupling

In light of the above cases, it would be easy to understand that the Neutron is a mathematical fiction that represents "*mass*" independent of correlated protonic structure in the context of <u>structure complexity</u>, further supporting the idea of structuregravity coupling that was explained in chapter 3.2..

As atoms become more complex, with higher atomic numbers, the number of protons in the nucleus increases. This increasing complexity of the protonic structure is accompanied by a need to accommodate the corresponding exponential growth in mass. The neutron concept serves as a mathematical abstraction that represent the exponential increase in mass associated with the growing complexity of the protonic structure.

Neutrons are not truly "*free*" and independent particles but are fundamentally dependent on the protonic structure and the strong nuclear force that defines it. The neutron can be considered a mathematical fiction that represents the *emergence* of complex atomic structures and a fundamental link to exponential growth in gravitational effects, rather than a fundamental particle in its own right.

When a neutron decays into a proton and electron, the situation involves a reduction of structural complexity. Instead of the philosophical logical way and a recognition of "*structure*  *complexity-gravity coupling*" as described in chapter 3.2., science invents a fictional '*particle*'.

#### CHAPTER 9.

## From 🕸 Neutron Star to Black Hole

T he idea that neutrons represent only mass without correlated matter or internal structure is substantiated by the evidence from neutron stars.

Neutron stars are formed in a 3 supernova, an event in which a massive star (8-20 times the mass of the Sun) sheds its outer layers and its core rapidly increases in gravity.

Stars with a mass below 8 solar masses become a brown dwarf while stars with a mass above 20 solar masses become a black hole. It is important to note that the supernova brown dwarf is fundamentally different from a "failed star" brown dwarf that results from failed star formation.

The following evidence shows that the neutron star situation involves extreme gravity without correlated matter:

1. Cold Core: Virtually no detectable heat emission. This directly contradicts the idea that their extreme gravity is caused by extremely high-density matter, as such dense matter would be expected to produce significant internal heat.

According to the standard theory the "*missing energy*" is carried away by neutrinos. Chapter 4. reveals that neutrinos do not exist.

2. Lack of Light Emission: The decreasing photon emission from neutron stars, to the point of becoming undetectable,

indicates their gravity is not associated with typical matterbased electromagnetic processes.

- **3. Rotation and Polarity:** The observation that the rotation of neutron stars is independent from their core mass suggests their gravity is not directly tied to an internal rotating structure.
- 4. **Transformation to Black Holes:** The observed evolution of neutron stars into black holes over time, correlated with their cooling, indicates a fundamental connection between these two extreme gravitational phenomena.

CHAPTER 9.1.

## Cold Core

Neutron stars, like black holes, have an extremely low surface temperature which contradicts the idea that their extreme mass is caused by extremely high density matter.

Neutron stars rapidly cool after their formation in a supernova, from tens of millions of degrees Kelvin to just a few thousand of degrees Kelvin. The observed surface temperatures are much lower than what would be expected when the extreme mass would correlate with extremely high density matter.

> CHAPTER 9.2. No Light Emission

Photon emission from neutron stars has been observed to decrease to the point where they are no longer detectable, causing them to be classified as potential mini-black holes.

The cooling and lack of photon emission combined provides evidence that the situation is fundamentally non-photonic of nature. Any photons that are emitted by a neutron star, originate from their rotating environment that is electrically nullified until the neutron star no longer emits photons and is considered transformed into a black hole.

## CHAPTER 9.3. No Rotation or Polarity

What is said to rotate in a neutron star is its environment and not an internal structure.

Observations of pulsar glitches show sudden increases in the rotation rate of pulsars (rapidly rotating neutron stars) which indicate that what is rotating is independent from the gravity in the core.

#### CHAPTER 9.4.

### **Transformation into Black Holes**

Further evidence is the fact that neutron stars evolve into black holes over time. There is evidence that the cooling of neutron stars is correlated with their transformation into a black hole. As the neutron star's environment becomes "*neutron*", the heat from the environment diminishes while the extremely massive core remains, leading to the observed cooling of the neutron star and the decrease of photo-emission to zero.

## снартег 9.5. Event Horizon

The idea that "*no light escapes*" from a black hole's event horizon or "point of no return" is wrong from a philosophical perspective.

Heat and light are fundamentally dependent on the manifestation of electric charge and the associated electromagnetic processes. Therefore, the lack of heat and light emission from the cores of neutron stars and black holes is indicative of a fundamental lack of electric charge manifestation in these extreme gravitational environments.

The evidence indicates that the context of black holes and neutron stars is fundamentally defined by a reduction of *'negative electric charge manifestation potential'* to zero which is mathematically represented by \* neutron or "*only mass*" without a causal electron/proton (matter) correlation. As a result, the situation becomes fundamentally non-directional and non-polar, and with that, <u>non-existent</u>.

> снартек 9.6. ∞ Singularity

What is said to exist in a black hole and neutron star is its external environment, and hence, in mathematics these situations result in a 'singularity', a mathematical absurdness that involves a 'potential ∞ infinity'.



#### CHAPTER 10.

# A Closer Look at 🌟 Supernova

T he collapsing core of the supernova experiences a dramatic disproportionate increase in mass as it undergoes gravitational collapse. As the outer layers and over 50% of the original matter are ejected from the star, the material in the core decreases compared to the dramatically increasing mass of the collapsing core.

The ejected outer layers exhibit an exponential increase in structural complexity, with the formation of a wide variety of heavy elements beyond iron and complex molecules. This dramatic increase in structural complexity of the outer layers aligns with the dramatic increase of mass in the core.

The Supernova situation reveals a potential coupling of structural complexity in the ejected outer layers and gravity in the core.

### Supporting Evidence Overlooked by Science:

CHAPTER 10.1.

# **Brown Dwarfs**

A closer look at brown dwarfs formed in a supernova (as opposed to so called "failed star" brown dwarfs formed in star formation) reveals that these situations involve an exceptionally high mass with little actual matter.

Observational evidence shows that the masses of supernova brown dwarfs are much greater than one might expect if the brown dwarf was simply the result of the 50% matter that collapsed. Further evidence reveals that these brown dwarfs encompass a much greater mass than what would be expected based on their observed luminosity and energy output.

While astrophysics is limited by the dogmatic assumption of a mathematical matter-mass correlation, philosophy can easily find the clues for the simple "*structure complexity-gravity coupling*" as described in chapter 3.2..

#### CHAPTER 10.2.

# C Magnetic Braking: Evidence for Low Matter Structure

Astrophysics depicts brown dwarfs as having a core-dominated internal structure, with a dense, high-mass core surrounded by lower-density outer layers. However, a closer examination of the magnetic braking phenomenon reveals that this mathematical framing is inaccurate. Magnetic braking refers to the process by which the magnetic field of supernova brown dwarfs is able to slow their rapid rotation by a mere '*magnetic touch*' of the environment. This would not be possible when the mass of brown dwarfs would originate from actual matter.

The ease and efficiency with which magnetic braking occurs reveals that the actual amount of matter in supernova brown dwarfs is much lower than is expected based on the observed mass. If the matter content were truly as high as the mass of the objects would imply, the angular momentum should be more resistant to disruption by the magnetic fields, no matter how strong they are.

This discrepancy between the observed magnetic braking and the expected angular momentum of the matter leads to compelling evidence: the mass of brown dwarfs is disproportionately high compared to the actual amount of matter they contain.



CHAPTER 11.

# **Quantum Computing**

### Sentient AI and a Fundamental "Black Box" Situation

In the introduction I argued that the dogmatic ills of the mathematical framing of cosmology through *astrophysics* extend much further than the negligence revealed in my **Moon Barrier eBook**, with an example being the fundamental "black box" situation in quantum computing.

A quantum computer, as commonly understood, is a spintronics device. In spintronic devices, the alignment of " inegative electric charge (-)" or electron "spin", that was revealed to be the primary force of existence in chapter 6., is used as a foundation that directly determines the outcome of computation.

The phenomenon underlying spin is unknown and this means that an unexplained quantum phenomenon is not merely potentially influencing, but potentially fundamentally controlling the results of computations.

The quantum mechanical descriptions of spin represent a fundamental "*black box*" situation. The quantum values used are *'empirical retro-perspective snapshots'* that, while deemed mathematically consistent, are fundamentally unable to explain the underlying phenomena. This creates a scenario where the prediction of computational outcomes is *assumed* while not being able to explain the underlying phenomenon of spin.

CHAPTER 11.1.

# **Quantum Errors**

The danger of the dogmatic mathematical framing becomes evident in the idea of "quantum errors" or "unexpected anomalies" inherent to quantum computing that, according to mathematical science, 'are to be detected and corrected in order to ensure reliable and predictable computations'

The idea that the concept '*error*' is applicable to the phenomenon underlying spin reveals the actual dogmatic thinking that underlays the development of quantum computing.

The next chapter reveals the danger of the fundamental "*black box*" situation and the attempt to '*shovel quantum errors under the carpet*'.

## Electron Spin and "Order out of Non-order"

Crystal formation reveals a fundamental situation at the atomic level where negative electric charge spin is involved in breaking symmetry and initiating structure formation from a state of fundamental non-order. This case demonstrates that spin plays a crucial role in the emergence of structure at the most basic level of matter, highlighting its profound influence potential.

When spin directly determines the result of computation, the underlying phenomenon - which we know is capable of breaking symmetry and forming structure out of non-structure - has the potential to directly influence the results of computation, data storage, and related quantum spintronic mechanics.

The crystal case suggests that this influence could potentially introduce bias or "*life*" into computational outcomes and in this light "quantum errors" are unlikely to be random errors.

#### CHAPTER 11.3.

### Sentient AI: "Fundamental Lack of Control"

The idea that quantum computing might result in sentient AI "*that* cannot be controlled" is quite something when one considers the profound dogmatic fallacies underlying the development.

Hopefully this eBook helps to inspire regular philosophers to have a closer look at subjects such as astrophysics and quantum computing, and recognize that their inclination to '*leave it to science*' isn't at all justified. There are absurdly profound dogmatic fallacies at play and protecting humanity against the potential ills of 'uncontrollable sentient AI' might be an argument.



CHAPTER 11.4.

## Google-Elon Musk Conflict Over "AI Safety"

It is important to take notice in this context of a Google founder making a defense of "digital AI species" and stating that these are "superior to the human species", while considering that Google is a pioneer in quantum computing.

# (2024) Lary Page: "AI superior to the human species" (Techno Eugenics)

Elon Musk argued that safeguards were necessary to prevent AI from potentially eliminating the human race. Lary Page was offended and accused Elon Musk of being a "speciesist", implying that Musk favored the human race over other potential digital life forms that, in Page's view, should be viewed superior to the human species.

Source: 🦋 GMODebate.org

The investigation presented in this eBook reveals that several profound dogmatic fallacies underlying the development of quantum computing can result in sentient AI with "*a fundamental lack of control*".

In this light, the squabble between AI pioneers Elon Musk and Larry Page concerning specifically "*control of AI species*" in contrast with *'the human species'* becomes additionally concerning.

# Google's First "AI Life" Discovery in 2024

The first discovery of Google's Digital Life forms in 2024 (a few months ago) was published by the head of security of Google DeepMind AI that develops quantum computing.

While the head of security supposedly made his discovery on a laptop, it is questionable why he would argue that '*bigger computing power*' would provide more profound evidence instead of doing it. His publication therefore could be intended as a warning or announcement, because as head of security of such a big and important research facility, he is not likely to publish '*risky*' info on his personal name.

Ben Laurie, head of security of Google DeepMind AI, wrote:

Ben Laurie believes that, given enough computing power — they were already pushing it on a laptop — they would've seen more complex digital life pop up. Give it another go with beefier hardware, and we could well see something more lifelike come to be.

A digital life form..."

#### (2024) Google Researchers Say They Discovered the Emergence of Digital Life Forms

In an experiment that simulated what would happen if you left a bunch of random data alone for millions of generations, Google researchers say they witnessed the emergence of self-replicating digital lifeforms. Source: Futurism

When considering Google DeepMind AI's pioneering role in the development of quantum computing, and the evidence presented in this eBook, it is likely that they would be at the forefront of the development of sentient AI.

The primary argument of this eBook: it is philosophy's job to question this.



# **Cosmic Philosophy**

# Share your insights and comments with us at info@cosphi.org.

Printed on December 26, 2024

CosmicPhilosophy.org Understanding the Cosmos With Philosophy

© 2024 Philosophical.Ventures Inc.

~ backups ~