



Viewing Nature as a Paradise Machine Through the Lens of the Fourth Law of Thermodynamics

By Bjørn Sponberg, for Head Biotech, Oslo, Norway, 2024.

Abstract

The Fourth Law of Thermodynamics, expressed as $Eu = 0 = \text{Paradise}$, can be viewed as a machine designed to produce a paradise state. This perspective effectively highlights intriguing aspects of the law, nature, and the universe. The paradise machine model appears to exhibit a recurring characteristic known as the zero-risk argument, which reinforces the validity of the fourth law. The principle that nature, or the paradise machine, is extremely focused on the question of the absence of risk lies at the core of the proposed machines design.

The paradise machine model suggests that the universe's sole purpose is to reach an eternal paradise state of 100% love and intelligence, the lowest form of energy in the universe. This view has already been launched in the previous three articles on the theory, but not in the form of a machine, but as a natural law, $Eu = 0 = \text{Paradise}$ (100% love and intelligence). Another interesting rationale behind introducing nature as a paradise machine is to provide an explanation for the universe's construction. The proposed model of nature may elucidate why the second law of thermodynamics appears non-coincidental. Similarly, the formation and nature of black holes are purported to align with the paradise machine's zero-risk design.

The suggested model of nature being a paradise machine could potentially offer insights into Fermi's paradox, suggesting that extraterrestrial beings are present but remain inactive, awaiting a signal

for zero-risk strategies achieved in less advanced life forms in the universe. Such less advanced life forms should include humans on earth. In conclusion, the articles solution to Fermis paradox is to apply the zoo hypothesis, rather than the more common great filter theory.

A consequence of this analysis on Fermis paradox is the approach theory, presented at the end of the paper. This theory posits that advanced life forms, which should have the same origin as Fermi life forms, already have begun to approach Earth. This due to have received the central theme in the article, the so-called zero-risk signal, from our planet. This signal should mean that a successful zero-risk strategy has been implemented in the struggle for survival, for the first time in evolution on earth. The quantum mechanism that physically generates the central zero-risk signal in the theory was previously proposed, in a 2020 article, to be observable in the well-known wave-particle duality experiment. This 2020 article, discussed how a quantum mechanism, also involved in wave-particle duality, is utilized by nature as a 'signaling device' to send a stress-signal (a signal for zero-risk) instantly across the universe. Alternatively, transmitted directly to the Fermi life forms located in the lowest energy state, $Eu = 0$, just beyond the event horizon. This follow up article, the fourth article in the series, integrates this quantum signaling mechanism as a vital component in the machines design.

The former 2020 article also introduced an Einstein-derived version of the equation $Eu = 0 = Paradise$, expressed more succinctly as $Eu = 0$

= C^2 . This compressed version of the original formula has proven valuable for illustrating what may exist beyond the event horizon and within the concealed regions of the Paradise Machine model.

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About the author.

Bjørn Sponberg is a researcher at Head Biotech. This article is the fourth in a series on a theory which aim to describe an universal law that is applicable to all life forms in the universe. The theory is named The Fourth Law Of Thermodynamics (also referred to as *the fourth law*).

Education. M.Sc. Bioinformatics (SU, Sweden), M.Sc. Molecular Medicine (NTNU, Norway) and B.Sc. Electronics and IT (OsloMet, Norway).

Born. 1975 in Oslo, Norway.

Part 1. Background.

Much of our understanding of black holes is theoretical, and several hypotheses about them remain unverified. For instance, the existence of Hawking radiation, theorized to extract energy from black holes, has not been confirmed. Similarly, the notion that black holes contain a singularity is an assumption yet to be proven. Nonetheless, recent advancements have led to the capture of the first images of black holes existence.

Fermi's Paradox questions why advanced extraterrestrial life, which should have colonized our galaxy by now, remains undetected: 'They should be here, but where are they?' One resolution to the paradox is that superior life forms might exist but choose to conceal their presence from less advanced species (such as ours). The Zoo Hypothesis presents such a solution to the Fermi Paradox. This article will delve into this group of theories that seek to answer Fermi's puzzle and will introduce its unique interpretation.

The theory on which this article is based is called The Fourth Law of Thermodynamics (from now on referred to as fourth law). The name is determined by the order of the already accepted laws of thermodynamics in use today from zero'th to third'th law. Hence, the first next thermodynamic law that is accepted by the scientific community will be called The Fourth Law of Thermodynamics. As a result, there are other theories out there neither yet accepted by the community, which

are called likewise. The fourth law posits that all life forms in the universe have a primary task: to convert all mass-energy into the third form of energy, defined as 100% love and intelligence. Also expressed as $Eu = 0$. This was stated in the first article in 2010.

A summary of the previous articles on fourth law.

The first article 2010.

The first article, written in 2010, introduced a new universal thermodynamic law. It expressed this law as an irreversible process where the universe moves toward paradise as its energy approaches zero ($Eu = 0 = \text{Paradise}$), and it used Nash equilibrium to describe the law's dynamics mathematically (Figure 1). The first article also introduced the concept of how all evolving life forms in the universe, would due to fourth law, cultivate the two traits love and intelligence. Until one day all of the mass-energy in the universe was empty. At that stage the universe had found its absolute lowest energy state, $Eu = 0$, which should coexist with the paradise state of 100% love and intelligence (figure 2 and 7).

The second article 2011.

The second article in the series was launched the following year in 2011. This second article in the series focused on the topic of dark energy and the exponentially expansion rate of the universe.

The first article had already launched the idea that any emerging life form in the universe would increase the concentration of love and intelligence (referred to in this article as the third form of energy) at the expense of mass-energy. Eventually producing the third form of energy, $Eu = 0$, at an exponential rate (figure 2). According to the fourth law these advanced lifeforms should eventually reproduce, producing the third form of energy, at an exponential rate which could be reflected in the observable exponentially expansion of the physical universe. Basically suggesting that the third form of energy is Dark energy, which the community suggest is what drives the expansion of the universe. The second article concludes that what is known as dark energy is the advanced lifeforms the first article predicted would be produced out there. And this is what we observe as the universe expands (figure 3).

The third article 2020.

The third article of the series, released in 2020 with an updated version in 2021, posits that the fourth law might explain the peculiar findings in wave-particle duality experiments, including the delayed choice quantum eraser effect. The article argues that if an intelligent being with more evil traits intends to observe a life form closer to the paradise state, the universe's energy state increases significantly. This should according to fourth law be analogous to humans observing the quantum world's minutiae, as nature's ego should already be in the third form (the intelligence which should have designed and control the paradise machine). If the $Eu = 0 = \text{Paradise law}$ is true, the universe (or the

machine this time around) should be capable of sensing the true intent behind any observation in a life form for its own protection. This interaction between intelligent intent behind an observation, with natures sensitivity towards changes in energy states, could account for the energy that prompts the transition from quantum wave to particle. And could explain the strange behaviors seen in wave-particle duality experiments. The fourth law implies that nature, embodying absolute love and intelligence, is superior to humans. The article suggests that nature's quantum-level sensitivity to the presence of malevolent phenotypes is used in nature to steer universal development towards the predicted paradise state. Securing the irreversible universal development that is hypothesized to end in $Eu = 0 = \text{Paradise}$. With a detection mechanism for zero-risk now also possible to steer the development towards the paradise state under conditions with constant abundance and reduced chaos (as Nash equilibrium stops working). In such conditions zero-risk strategies should become possible in the struggle for survival game. Hence such a hidden signalling mechanism in nature, hidden in the quantum world, should be used as a security barrier against a continued accumulation of evil traits in nature. As described in the important "casino rationale" elsewhere in this article, nature might take a zero-risk situation as a personal threat. We could find ourselves in a scenario similar to the wave-particle experiment, where nature's personal ego also becomes under threat as we observe natures inner components, the quantum wave. The idea is that both actions might provoke a reaction in the quantum world, as if it in both cases senses an "evil intruder." In the zero-risk case, this could result in

a stress signal in the quantum world, suggesting nature's ego feels threatened by a rival lifeform (see also figure 15).

The proposed zero-risk mechanism launched in the third article serves as the central concept of this very article, due to its central concept in the machines design (the zero-risk argument in part 4). In part 5, the focus shifts to how the ideas in the third article were conceived parallels with the arrival of Oumuamua (the first recorded interstellar object) into our inner solar system in 2017. I speculate in part 5 that this solution to the wave-particle duality enigma presented in the third article from 2020 might potentially "be from them" (assuming Oumuamua was an intelligent probe, for example). It could eventually reveal what brought them here, that they received a universal transmitted zero-risk signal. It's a far-out idea, but it might explain how the wave-particle duality enigma was resolved, assuming the solution is genuine, of course. This is perhaps the boldest prediction in this article series, as it basically suggests that Fermi life forms 'communicate with us' through me and this article series. Proposing this idea in part 5 was no easy task, as it could understandably make me a candidate for being committed to a psychiatric hospital. However, this bold idea was essential to completing the approach theory outlined in Part 5 (Figure 19). With no viable alternative, I felt compelled to propose this unconventional hypothesis of this article series being from 'them' (from the Fermi life forms), thereby finalizing the theoretical framework.

The latest revision of the third article from 2021 introduces a discussion suggesting that the integration of the fourth law with Einsteins $E=MC^2$ which should produce $Eu = 0 = C^2$. This integration of the two formulas (by viewing M and E as chemical substrates in a gigantic universal irreversible reaction) could reveal insights into the physical state of the so-called paradise state. The result, $Eu = 0 = C^2$, is the so-called 'Einstein derived version of fourth law' described in more detail in a youtube video (figure 15 and references). It posits that the suggested paradise state, may relate to light and consequently, to waves. Drawing on Joseph Fourier's theories, it is proposed that the paradise state in fourth law could be represented as in a mathematical wave format. This could allow for the replication and placement of modern humans into this mathematical paradise format offering a theoretical bridge from our mortal world to a perpetual eternal paradise-like existence encapsulated by the equation $Eu = 0 = \text{Paradise}$.

The fourth article 2024 (this article).

This very article presents nature as a paradise machine, focusing on the fourth law's potential role in black holes and using the new machine concept to explain Fermi's paradox. A key outcome of the article is the development of the so-called zero-risk argument, which seems to be prevalent in the paradise machines design. This suggested design takes us closer to nature as it can reveal much of its thinking in particular on morale. The argument concludes that nature (the machine) is structured

to prevent any emerging life form from overtaking it by exclusively cultivating zero-risk strategies itself.

This article also suggest that the zero-risk detection mechanism (used to disclose a threat from lower life forms) presented in the third article, is not only designed to be used in self defence, but designed as a trap towards its natural rivals living in the machine. The article also launch the women-baby idea which role for nature should dramatically change based on the suggested design of the paradise machine (the zero-risk argument). By increasing the female genders affection towards babies and small children she would simultaneously be safer for nature to use as the main vehicle for higher intelligence. At the end of the article this is used to explain the strange encounters with the so called 'women of paradise' during the first inception of fourth law in 2005 and 2006. A final idea to end the article series on fourth law is that these incidents could be a sign from the advanced life forms the fourth law always has predicted to exist out there. If this is correct, it could mean that all the ideas in the article series is universal valid. Basically suggesting that this article series has been natures initial respons to a first zero-risk event taking place on earth around 2005.

Part 2. The importance of zero-risk in nature.

(In theory, absolute zero-risk scenarios should technically not be possible to achieve in this universe. For example, theoretically there is a chance that all the air molecules in a room could clump together in one

corner of the room, hindering you from breathing, it is just extremely unlikely to happen. For all practical purposes it will never happen. But the chance is not absolute zero for it to happen. It might be more correct to use the term ‘low-risk’ instead of ‘zero-risk’ scenarios. However, the main idea behind the zero-risk term is to describe a critical risk-situation in the struggle for survival in which nature knows there are no going back.)

The third article claims that the wave-particle duality mechanism was designed by a higher intelligence. Its purpose is to detect zero-risk strategies in emerging life forms, like those on Earth. If nature do has an ego, and did not stop zero-risk strategies, it would end up losing in its own game, like a casino owner would. This is the so called casino rationale which will be brought up several times in the article. The casino rationale compares a casino owners situation with natures ego. Basically saying that if a casino owner would not respond to zero-risk strategies among its gamblers (gamblers that managed to cheat), it would be catastrophic for the casino. This zero-risk view is based on the suggestion that there exist a hidden ego in nature — an ego which we can not see. But if it exist it would probably be interested in stopping zero-risk strategies. Since to nature, allowing zero-risk strategies, would be similar to a casino which allowed gamblers that were able to turn the odds against the casino. In many ways this casino rationale makes up the foundation of this article. Giving nature the motive to implement a zero-risk detection mechanism in its design.

The significance of zero-risk signalling in the Paradise Machine Model.

To the paradise machine model a received signal of zero-risk in a life form could mean many things. Not only that the emerging life form is about to become a threat, but probably also signals other facts about the life form. For example that the life form in question is about to become a multiplanetary species (such as ours). The paradise machine model proposes that the critical stage of achieving zero risk is a significant component of the machine. From analysing its design the golden rule seems to be this; the only life form that is allowed to obtain zero risk strategies in the struggle for survival is nature herself. Furthermore, I suggest that humans on earth already have arrived at this critical stage, and already has activated natures zero-risk detection mechanism. The initial zero-risk situation might not immediately threaten nature. However, if ignored, it could lead to the emerging life form overpowering nature, similar to a casino that neglects cheating gamblers. The first few individuals that learned how to achieve zero risk, would probably first dominate earth, but eventually they would come for nature herself (imagining an ego in nature). Natures fear of being dominated by these nascent life forms constitutes the zero-risk argument brought up in part 4. And by analysing the machines design the impression is that it is something serious at stake in the game. This desperation in its design suggest that it is more at stake than just to live or to die. As if life forms that achieves zero-risk is alikened by nature to evil traits (something that wants to hurt natures ego). It does not need to be so, but seen through the lens of fourth law, nature seems to do

anything in its power to detect and to control zero-risk achievers in any emerging life form in this universe. Nature, in this article referred to as the paradise machine, seems to be designed with a zero-risk strategy on its own not ever to be dominated by what it conceives as evil. Hence, making herself being the only entity in the universe which can uphold a zero-risk strategy. Consequently as soon as the machine detects a zero-risk strategy in an emerging life form in the universe — nature, which now means the machine, should respond. The important question rised in this article therefore is; why is nature so concerned of being dominated by an emerging life form? Is it more at stake for natures ego than considered in the casino rationale; ‘the future business of the casino’ (basically to live or die)? The suggested answer to the desperation in the machines design is gruesome. However, in this case this idea give us a chance to get to know nature better (closer discussed in part 3). In conclusion, the paradise machine (nature) seem to obey a principle of justice and also to have soft sides like forgiveness. As the only rule seems to be; as long as you have not tried to dominate me by achieving zero-risk, you are fine. As if nature shows an understanding of all the struggles emerging life form has been through. And that nature even plan to reward those who have not achieved zero-risk strategies by placing them in the eternal paradise state, almost to say sorry for the inconvinience. This contradictory to the gruesome production method the machine might use, indicates an interesting point which is discussed further in part 3. That the gruesom way of producing the paradise state described in part 3 could for example be a built in curse from whomever created the universe. A curse the designer of the universal paradise

machine has been forced to deal with. Making the best out of the curse (that the only way to produce the paradise state must include a parallel hellish state), would perhaps be to implement a zero-risk detection mechanism in its design. And eventually make up for the troubles endured by the innocents by eventually rewarding them the eternal paradise state. Furthermore, according to this version of the paradise machine model, the only individuals who can end up in the gruesome part of the machine are those whom the machine can prove have planned similar actions towards natures ego. This is the intended purpose of the zero-risk detection mechanism in nature and is thoroughly discussed in Part 3. The proposed design adheres to a principle of justice, aligning with the fourth law that posits nature as being fundamentally good. The alternative explanation is that the advanced life forms which has designed the machine has a different set of moral standards than us (also discussed in part 3). Basically that they dont see the moralistic problem as long as they can mathematically prove the solution to be fair, by using a zero-risk detection mechanism. And thereby still claim that nature is a good machine.

The Second Law of Thermodynamics is considered the prime mover.

The fourth law posits a direct correlation between energy context, the order of chaos, and the risk factors that influence the outcome of good or evil traits. This natural equilibrium is governed by the Second Law of Thermodynamics, which serves as the prime mover in fourth law, reflecting the finite energy concept in the universe. The Fourth Law of

Thermodynamics ($Eu = 0 = \text{Paradise}$) presented in this article series is an extension to the already established Second Law of thermodynamics (Eu seeking 0). If this article series version of a Fourth Law is valid, it should have worked on all life forms that ever to have existed in the universe. This includes the very first life forms which in theory could have started to evolve as soon as about 15 billion years ago. These life forms should be what Enrico Fermi referred to as the advanced life forms that should be all over the universe. Hence his famous question: where are they? Why don't we see them? They should be here by now. Consequently, according to fourth law it is theorized that these advanced life forms, referred in this article to as Fermi lifeforms, may be much closer to the paradisiacal state predicted in fourth law than humans. As they should have evolved along the projected path in fourth law for as much as 15 billion years. This was brought up in the second article in this article series from 2011. Basically saying that these more complex lifeforms should be of higher concentration of love and intelligence on the expense of mass-energy (now being in the third form of mass-energy). Similarly, it is suggested that life on Earth is destined to follow the same evolutionary trajectory, continuing to increase our concentration of love and intelligence. As presented in the third article, should an emerging life form such as ours begin to accumulate malevolent traits (and thereby activate a zero-risk detection mechanism), the paradise machine should stop it based on the casino owner rationale. As if nature equates willingness of taking zero risk with willingness of doing evil.

When the energy state of the universe reaches zero, $Eu = 0$ (the whole universe should be on the third form), the fourth law foretells that this state will for us be experienced as a state of paradise (100% love and intelligence). To the universe it will probably just be experienced as another energy state ($Eu=0$). This will also make sure that with all mass-energy transformed into love and intelligence, the paradise state will not revert to the earlier energy-mass form, because these energy forms (mass-energy) is at a higher universal energy state. One can say the mass-energy on the third form is at a more stable 'energy form' not yet observed by humans. But indirectly observed in the workings of dark energy (universal expansion) as suggested in the second article. Explaining why dark energy seems to accumulate, not to go back to its former higher mass-energy state.

The interplay between energy context, chaos, lying and risk.

Life's natural state, as understood through the Second Law of Thermodynamics, inherently involves a certain level of chaos. This chaos correlates with risk. The greater the chaos, the less control, the higher the risk, particularly from the perspective of the dominant entity at the time. It is within this natural state, a natural equilibrium of energy context, chaos, and risk the fourth law introduces Nash's equilibrium (figure 4). This concept mathematically delineates the strategies in life that reduce the universe's energy state (moves it closer to paradise), which is also where the emergence of love and intelligence occurs in nature (as in a love producing machine). Figures 4 and 6 illustrates this

equilibrium in nature (Nash equilibrium), which until now has been guided by the second Law of thermodynamics (since limited energy has created natures chaotic context Nash equilibrium needs to work). The result has been that love and intelligence has been given the status of fitness in the struggle for survival. If so, nature can now be viewed as a paradise machine with only one thing in mind; reaching its lowest energy state, $E_u=0$, and consequently the hypothesized paradise state filled with 100% love and intelligence.

The biological proof in Fourth Law of Thermodynamics.

As a result of the above, the accumulation of beneficial traits over detrimental ones, should come with observable evidence in nature. If the pattern just described is true, it should be rather easy to spot this pattern after over 4 billion years in this ‘good equilibrium’. This evidence is referred to as ‘The biological proof’ (figure 5). Fourth law uses ants as ‘the biological proof’ to support its core principles. Ants are selected for their parallels to human society and their extensive adaptation to natural chaos over millions of years. Despite this long period, ants have not shown a propensity for developing detrimental traits over beneficial ones; rather, they demonstrate the opposite. For example in figure 5 the ants are sacrificing themselves for one another by creating a living bridge. Hence, greed does not systematically seem to be given the status of fitness in natures equilibrium. Further, the same pattern can be identified in all natural life forms on earth, including humans. It is just easier to identify the behavior in a more primitive life form, such as ants.

Energy context as prime mover in the development of evil phenotypes.

The fourth law suggests an unbreakable sequence of events that lead to the manifestation of both evil and good traits in nature. The natural outcome in this universe, as evidenced by the biological proof (figure 5), should be the accumulation of love and intelligence. Moreover, the prime mover behind what seems to be the net production of love and intelligence is attributed to the second law of thermodynamics. Essentially, this means that the prime mover is a context of limited energy. Its role in the dichotomy of chaos versus order may render energy context the prime mover. This since Nash equilibrium is likely dependent on the level of chaos to work in the survival-game. When energy is scarce, nature is compelled to generate a certain amount of chaos, guaranteeing Nash equilibrium to work. Conversely, in an environment of constant abundance, a system could minimize the chaotic elements. Under such new and unnatural circumstances, Nash equilibrium might diminish in significance, thereby altering natures definition of what fitness might be. We are probably not talking about physical fitness that worries nature, but mental traits to be the major energy drain (more on lying under). According to the fourth law, it is during this shift in energy context (and chaos) that the determination of whether good or evil traits are favored with fitness by nature. Moreover, the fourth law suggests that the universe is programmed from its inception to culminate in a world where true positive traits are given fitness over evil traits. This should be guaranteed by designing the universe with the second law of thermodynamics (making it a place with

limited energy). Theoretically, if the universe were created with constant abundance, it should likewise be programmed to reach the opposite state of paradise, the concept of hell. In such a machine a principle of justice and the gentle and soft sides described in this model later would probably vanish with the second law of thermodynamics (limited energy). In summary, the second law of thermodynamics could be considered the prime mover in the universe's progression towards the paradise state. It is therefore one of the zero risk arguments in part 4.

How lies and truth should represent evil and good traits respectively.

The prime mover principle seeks to further explain the production process described over (see also figure 8). As previously mentioned, the energy context influences the level of chaos and, consequently, the risk involved in the survival game. Ideally, a zero-risk strategy is only achievable in a scenario with constant abundance, where chaos can be eliminated to minimize risk. Moreover, the fourth law posits that lies consume energy in nature, hence removing the punishment of excessive deceit in the survival game. While mimicry and camouflage are common, fully cultivating a lie does not appear to be advantageous as a dominant trait so far in nature. In fact fourth law assumes that evil traits is an enormous energy drainage not easy to see by humans, in comparison to for example physical handicaps. Physical handicaps should not be something nature is afraid of, but rather the invisible energy drainage of mental traits. This energy concept regarding lies was also highlighted in the first article (figure 9). For example a physical

handicapped person should not be an issue to nature as long as the individual has not triggered the zero risk mechanism described in the third article. According to the principle of justice rule in the machines design a handicapped person would probably be taken extra well care of in the paradise state (to balance out the unfair situation, even though the handicapped person used more energy than a healthy person). The point here is that the energy principle in the universe is not there to punish for example physical handicaps, but to hinder accumulation of evil traits which probably is the worst possible energy drainage. Therefore, if the machine must follow a principle of justice in its judgement (part 3) a handicapped person should in theory get an extra reward in the paradise state. Again underlining the fundamental importance of zero-risk, or not zero-risk, in natures judgement of a life form. In addition, this example illustrate how the paradise machine model (via its focus on zero-risk or not zero-risk) can bring to light softer sides in nature, impossible to see so far. The negative mental traits nature fears (evil traits), will probably conceal their presence as much as possible and persist until the deception is complete. The underlying motive would be to reduce survival risks. The question is, when will evil traits stop hiding if nothing stopped it? Its tempting to speculate that the ultimate goal is a '180 degrees flip', cultivating the lie 100% (figure 10). Which according to the theory will be possible to achieve in constant abundance, but not before.

Part 3: The paradise machine model and morale.

Evil traits will probably seek to flip the truth 180 degrees.

When a dominant trait changes from good to malevolent, deceit becomes essential for the malevolent traits to hide from the good majority. The fourth law suggests that malevolent traits remain in the minority as energy contexts shift from chaos to constant abundance (in the transition going from chaos to order). This means there should be a phase in which malevolent intentions need a disguise to appease the majority, leading to a continuous pursuit of lies. The second law of thermodynamics should so far in evolution have prevented the cultivation of 100% perfected lies. As 'the strength of the lie' should be directly connected to the energy states and the degree of chaos in the Nash's survival game.

Around 2022, a theory emerged in relation to the fourth law suggesting that the surge of black metal music culture in Norway during the early 1990's was not a coincidence. This new and unique norwegian artistic expression was a revolt against a society perceived as deceitful and insincere. The idea relative to the fourth law posits that the cultural shift in Norwegian society, primarily influenced by the burgeoning oil and gas industry, led to a new era of energy abundance not seen before. This emerging system had a low population and the newly excess energy obtained was used to reduce chaos (high taxes combined with rules based order). A perfect storm for evil traits in the eyes of fourth law. The

idea speculates that the satanic themes in black metal directly opposed the societal norms that youth culture rebelled against, representing a complete inversion of public values (a 180-degree turn relative to what they rebelled against). According to fourth law the Norwegian society might have been in a perfect storm that allowed for a complete inversion of truth, which according to the fourth law, are expected to be exploited by evil traits. In essence, the satanic black metal culture could have been a reflection of the very evils it opposed, hidden behind 100% perfected lies. The idea is to imagine that the black metal rebellion did the opposite, in other words, displayed 180 degrees of what they perceived as a lie. Furthermore, if what they saw indeed was a perfect lie, envisioned by flipping the truth 180 degrees, the black metal culture would actually project what lay behind what they were rebelling against (human rights, freedom, fairness etc). This speculative concept was illustrated in a sketch (figure 10). In essence, one might use the artistic expressions of the black metal rebellion as a projection of what could be concealed behind perfected lies. It's an intriguing concept that, by applying the logic of the fourth law, black metal's artistic expressions could have created vivid depictions of 'evil', perhaps exploring the realm of demons, if such entities exist at all as illustrated in figure 10.

Remarkably, the fourth law was uncovered within this very system, which, in hindsight, appears ideally suited to manifest the malevolent traits it predicts, creating a perfect storm for 'demons' (if such exist). This could potentially mark the first time genuine projections of a demonic realm have been evoked, driven by these artists' relentless pursuit to

create the perfect counter-narrative to what they perceived as a lie. If they were indeed opposing a perfect lie, they unwittingly generated projections of what we might call ‘demons’. The reassuring aspect, according to the fourth law, is that these elements of life are deemed weak traits, destined to have no future in this universe. Moreover, if a zero-risk trap is an element of the paradise machine model, then the newly emerged Norwegian society might have the ideal conditions to be the first life form on this planet to have triggered such a mechanism described in the 2020 article. Signalling to nature that it was about to be dominated by its natural rival, evil traits. This does not imply that the Norwegian population itself is inherently evil; rather, that their society was perhaps the first on the globe to be trapped in this perfect storm. A perfect storm which removed all factors that prevented malevolent traits from becoming influential in their society. It is tempting to anticipate that the zero-risk trap has been activated in this society, consequently leading to the creation of the fourth law (details to follow in part 5). The phenomenon of the Norwegian black metal scene in Norway is yet another intriguing observation done when seeing a situation through the lens of the fourth law.

Why lies becomes so effective in the transition going from good to evil.

In an environment where energy is abundantly created, evil will likely attempt not only to remove chaos but also to perfect its camouflage. As a natural result such life forms will reduce its risk taking in the struggle for survival as its camouflage improves towards perfection. It also

support the view that evil traits should be more comfortable with zero-risk strategies, and therefore become the first phenotypes on earth to trigger the proposed zero-risk mechanism. This connection between energy context, chaos, lies and risk was also discussed in part 2. Lies that flourishes in an environment rich with energy and reduced chaos becomes a key factor in how evil traits might dominate good ones. These elements seem to be interconnected. In a setting where energy is abundant, adopting to create perfected lies should evolve as a survival trait for evil traits. In particular while being in the minority phase of transitioning going from good to evil traits in the power hierarchy. The most effective lies, those which minimize risk the most, are likely to be favored. Probably luring gooder traits into their own domain of reduced chaos. As this context for survival will give according to fourth law evil traits fitness, over good traits. In the same manner good traits have been given fitness so far in evolution, so should the definition of fitness change with change in energy context. Hence as evil traits is given the definition of fitness (as evil traits do become stronger), but it does not suit nature's original energy setting, eventually decided by the second law of thermodynamics. But there should exist pockets in nature in which evil traits are given fitness. One of the main discussion points in this article is, what is natures purpose in giving evil traits fitness, at all? Even if it is located to isolated pockets in its system? A central argument in the paradise machine model is that evil traits reveal themselves to nature by activating an embedded zero-risk mechanism. It is hypothesized that before this activation occurs, nature does not pay the life form in question any attention (including life on earth). The zero-risk signalling

mechanism is probably activated once lies become 100% effective (perfect 180 degree flips). At this stage more advanced life forms in nature should be the only intelligence that is able to see the situation at hand (as the life form in question is exposed to perfect lies). That there comes a point where there is no chance that good traits can rescue themselves from the growing influence of evil traits. The zero-risk detection mechanism launched in the third article should be responsible for detecting any such scenarios in the universe. Alarming the remainder of the universe that evil traits has gotten the upper hand somewhere in the universe (somewhere in the machine). Why does the camouflage of evil traits effectively counteract less malevolent traits? It may be because evil traits are unnatural, a foreign element not yet known to Earth's natural life forms. Thus, the majority, who possess good traits, may be unable to discern their natural adversaries behind the perfected deceptions, as they have not experienced this scenario before in evolution. It would therefore also be hard to imagine such a strategy as themselves probably is not capable of finding any comfort by doing so. Basically an instinct that will distance them from aggressively to pursuit zero-risk strategies themselves. Hence, having developed talent to create perfected deceptions should become in particular effective towards the healthy majority — as it is a new and unknown domain in evolution. Never fully experienced in life on earth before.

Is the zero-risk detection mechanism designed in self defence or not?

The concept of a zero-risk sensoring mechanism, demonstrated in wave-particle duality, was introduced in the third article. The assumption was that the mechanism was used in self defence based on the so called 'casino scenario' mentioned earlier. Basically saying that if nature did not stop zero-risk strategies it would die in its own game (go bankrupt in its own casino). The paradise machine model, presented in this follow up article, propose that nature always has been prepared for the inevitable emergence of zero-risk strategies described over. That this scenario are meant to unfold and to be captured by the zero-risk mechanism discussed in the third article. The reasoning is somewhat brutal and do show a potential gruesome side of nature (see discussion later). It does not reflect the softer sides in the paradise machine models design. Hence, this needs a more detailed debate, a moralistic debate. This section of the article (part 3) explores why this trap-like feature should be a part of the machines design. Part 4 explores further where in its design it can be shown that the zero-risk detection mechanism is designed as a biological trap, and not in self defence (as was assumed in the third article). The model depicts a paradise machine that is ruthless towards its natural adversaries in the suggested design. By exploiting their 'mistake' of triggering the extremely sensitive zero-risk mechanism in the production phase of the eternal paradise state (figure 11). The good news is that the machine seem to obey a principle of justice in its workings. Moreover, designed to ensure that for example all children and innocents (not mental greedy enough or capable of achieving zero risk strategies) are directly placed in the paradise state. This is one of the first signs that such a predatory designed trap at the

same time shows soft sides. With mathematical precision this design is protecting children, giving them direct access to the paradise state. It is in this borderline between triggering zero-risk detection, or not, the model gives interesting insights (as it did with the handicaps in part 2). How the machine is designed could tell us a lot about the designers moralistic foundation. In addition this part of the article will use this discussion to emphasize that a predatory designed zero-risk mechanism, could help to elucidate Fermi's paradox. Giving credit to the so called zoo hypothesis, which suggest that the reasoning for us not discovering advanced life forms essential is due to them sitting idle and wait for a zero-risk signal. As if the machine is designed to lure its natural rivals, as if prey, the bait being to offer what seems to be a potential risk free strategy in the struggle for survival. Hence their concealment should become crucial in the machines design for the trap to be effective. The trap is probably 100% effective. And there is reason to believe that it has been employed in nature countless times, perhaps trillions. Hence the machines trap should have evolved to perfection similar to how other life forms traits in nature has.

The paradise machine model on Fermi's paradox.

To uphold a principle of justice, it should not come as a surprise that nature is designed to conceal the true situation to an emerging life forms nearing to achieve zero risk strategies. Humans do the same in their own designed traps. You do not want to alert the prey that it is about to go into a trap. Just that, this time around we could be the potential prey.

As if the machine offers zero-risk strategies as bate in a trap. But why? The explanation in the third article was that such a mechanism was used in self defence, but to the paradise machine model, the reasoning for the mechanism could be different. If an emerging life form (such as humans) was given a reason to suspected the existence of a more advanced life form, the trap would probably not be as effective. Those who felt the urge to achieve zero risk strategies would probably be more careful, decreasing the efficacy of the trap. Although there is hope for divine intervention (religions etc), but to date, there has been no solid evidence of the existence of more advanced life forms in our surroundings. Instead, all collected data suggests that no powerful force in nature intervene to prevent injustice (by allowing natural disasters, accidents etc). In this context, it would be highly tempting for nature's adversaries, embodying evil traits, to continue its greedy strive towards zero risk. Not worrying about consequences, as long as they manage to escape being caught by other humans on earth. In other words, the zoo-hypothesis seem to be a pre-requisite for the zero-risk trap design to work, making the design 100% effective. If correct, it probably means that the trap works everytime and that it has been used countless times before in nature, eventually becoming part of its perfect design. In conclusion the hypothesis therefore suggest that the paradise machine has a design which are tailered exclusively to catch its natural enemies (defined by nature as evil traits based on their willingness to execute zero risk strategies). And the gruesome part of the design; to later use them as substrates in producing the paradise state to its own kind; those that never executed zero risk strategies (figure 11). It is now time to look

closer at the machines moralistic values. What moralistic considerations could lie behind such a, to us, gruesome design?

Moralistic principles in the paradise machine model.

The question of morality naturally arises in relation to the described design, which to us appear as gruesome. In that such a design would necessitate a state of eternal hell to facilitate the already predicted state of eternal paradise (figure 11). The question is how natures ego and the assumed advanced life forms look at it, as they are probably the ones that dominate the machine. This discussion of the moralistic principles in the design will also help to pinpoint examples of differences in our two life forms behaviour and thinking. Does the great distance in intelligence between our two life forms affect the question of morale and empathy? That is, to them (Fermi life forms) it might be obvious that such a gruesome solution is acceptable as it is in accordance with the principle of justice, in which the machine seems to be designed around. For humans the solution would appear as gruesome even if the principle behind it can be consider as 'fair play'. It seems that they use their pre-knowledge of what a certain intelligent life form is capable of doing to them after executing a zero-risk strategy, knowing at an early stage they are willing to hurt them. As suggested in part 4, even willing to place them in the hellish part of their own futuristic paradise machine. Without us even knowing that we would going to do so by achieving zero risk strategies in nature. But still, most humans will have a hard time to follow this reasoning of justice. Why not just stop them as suggested in the

third article and leave it with that? The suggested design in the paradise machine model could mean that they use their advanced intelligence to calculate future actions, based on the information given from the zero risk trap. It probably means that they know, as soon as an emerging life form willingly achieves zero risk in the struggle for survival, that they will send them to hell, in order to create their own paradise state (later referred to as a universal curse the machine has been forced to deal with). This apparent contrast in judging moralistic principles could reveal interesting views into what separates us. In their world they apparently are willing to judge someone before they have committed a crime. It could be understandable from a human perspective if they could prove with a 100% certainty that a zero risk strategy revealed such a predicted behavior (placing other life forms in eternal hell to produce paradise for themselves). The second question which arises is not as easy to answer. As humans we would think 'how can they be so brutal?', even though they could prove a lower life forms future actions. They would probably not understand the issue, just claiming that the solution is provable 100% fair, as these emerging life forms would do the same to them. And that their empathy stops there. Still as humans we could hope there is not such a design and/or that no one has triggered the hypothesized zero risk trap yet. At least to find an alternative solution to produce the eternal paradise state? However, this article is about to suggest that an activation of such a zero risk trap already has taken place, and is what brought forward this article series to begin with (see The Approach Theory in part 5). Further, such a gruesome scenario is suggested in part 4 to be reflected in the machines design, described as the zero-risk

argument. That as one study the machines design closer a pattern emerge. The machine seem to be designed with a desperate need of never losing control over the machine. As suggested this desperation found in the machines design originates from the horrific scenario described in this part of the article. However, it is important to constantly remind the reader of that is this design is real, children and babies are protected with 100% certainty by the same design. In addition, the female gender is probably somewhat protected from executing zero-risk strategy based on the so-called women-baby idea (more on this later). In summary, taken the whole design into consideration, the designer of the machine must with no doubt have a gentle and soft force, in its core. Why would the machine care to protect the innocent? As long as you dont step on the designers ego (avoiding executing zero risk strategies) you should be fine (along with the children). To achieve zero-risk is probably not easy even if you tried (in particular in a natural chaotic context), but the article suggest that someone on earth has managed to do so, and that it was meant to happen from the designers perspective. But the purpose with the paradise machine should be what the name suggests; its job should be to produce the paradise state as its main 'product'. Probably based on the rationale, the more paradise — the better. As the hellish part of the machine, if it is real, probably is only a small but necessary component in the production process (see also 'The good side of the paradise machine model' under). We can hope that this aspect of the machine is not as hypothesized over, that perhaps the machine manages to produce the mental state in the paradise state via another mechanism. On the other hand, it could be wise to discuss

this possibility in order to limit the damage, hindering other individuals to 'blindly marching into hell'.

The good side of the paradise machine.

A novel, albeit somber, aspect of the paradise machine is the implication that a parallel state of eternal hell is an intrinsic component of the machine. Why the machine needs to produce the feeling of safety and joy in the paradise state in this manner (more under), is a topic beyond the scope of this article. Ideally, one can say it should not be necessary for higher intelligence levels to inflict pain on others to create an illusion of paradise. But ironically, the proposed design using a zero-risk trap to produce the paradise state does come with a moralistic framework. Why does the machine use extra resources in this production process? Wasting energy by allowing constant abundance to enable zero risk strategies in emerging life forms. Why not just place some random individuals in the hell state? It would not be fair, but to the observer entering the paradise state it should be irrelevant, they would experience the sensation of paradise anyway (if the rationale behind the experience is correct). It seems that the machine is dominated by a principle of justice which controls the machine. Furthermore, if the machine was truly evil and based on injustice it would probably place everyone in a hell state. To produce the paradise state seems to be important to the machine but also to produce the state with a principle of justice. Another notion of using a zero risk trap becomes highly protective of children and those who never was given the opportunity to

implement zero-risk strategies. Hence the design seem efficiently to spare the innocent which we can relate to as a clear sign of a moralistic core in the machine. If the machine works in this manner, there would probably be very few individuals that have been unfortunate enough to trigger the trap (unfortunate seen from the human perspective). In other words the purpose behind the machine does not seem to produce a hell state, but to produce a paradise state, for the vast majority. Perhaps also including animals as they neither can achieve zero-risk strategies. This proposed softness in nature should not be taken for granted as it could be much worse. Despite its brutality, the design of the machine seem to be forced by 'someone' to produce the paradise state in a fair manner. This is in accordance to the core principle in fourth law that this world is dominated by a good force and also explains why the second law of thermodynamics is. An alternative could be a machine that was constructed to favour injustice and to punish justice. This is out of our control. All humans on earth should be able to agree on this. The machine could be worse, much, much worse. Based on the above, the borderline between hell and paradise should be made by the integrated zero-risk detection mechanism. It indicates that nature, or God, is not that strict when it comes to qualifying for eternal paradise as traditionally thought. Natures only demand seem to be that the principle of justice is upheld. Hence, as long as you have not tried to place natures ego in hell (by not achieving zero-risk), nature will not do it to you. A principle of justice also indicates that the paradise state might have different levels distributed by the same principle. However, this topic is out of scope for this article. As the question of hell or paradise becomes a pivotal

question in comparison. I guess one can compare it to how a mother will treat her own children, one might get an extra sweet for good behavior, or to compensate for unfair treatment, but she would take well care of all her children. Ensuring that the principle of justice is upheld, also within the paradise state. This example is a good way to introduce the women-baby idea and the theory on why the advanced life forms Fermi talked about should, according to the paradise machine model, be on the female form. The women-baby idea also confirms the importance of the zero risk argument, that the importance of zero, or not zero risk, is the machines highest priority.

The women-baby idea.

According to the basics in fourth law the female gender in the human species should have a tendency not to share the same concentration of love and intelligence with the male gender. The difference should be extremely minuscule and stem from the idea that women holds the power of sexual lust which might have given her easier access to 'free food'. Hence, affecting her energy context in her struggle for survival process relative to the male. In addition the females role as caretaker for the home and children have made her occupied with other activities than to collect food herself. In sum it is tempting to imagine that the female sex on average has been developed in a slightly different thermodynamic context than the man. To fourth law any such minute difference in energy context becomes interesting. Based on this rationale, according to the logics in fourth law, the male gender should

on average be somewhat closer to the paradise state than the female. However, the desperation in the machines design discussed over should make the machine to prioritize the zero-risk argument before any other issue. And it is in this aspect the women-baby idea enters the discussion. It has shown to greatly affect the direction in which this article has taken (see The approach theory in part 5). The women-baby idea suggest that the female gender is going to be favoured by nature in the near future due to her stronger gift of mercy, which should stem from her ‘natural talent’ in taking care of babies and small children. The younger the child, the closer it should be to representing a zero-risk situation in nature. It is pretty safe to say that a new born baby is 100% helpless if not helped, hence one can say that a newborn baby finds itself in a zero-risk situation in nature. What is interesting is that the female gender has adapted to this scenario via her natural affection for babies and children (even her physical appearance is adapted to ‘serve the baby’). This extra affection towards children should similarly have given her extra immunity towards executing zero-risk strategies. The point being made is that nature, or the machine, will exploit this in the production of higher concentrations of intelligence (which according to Fourth Law should take place in the near future illustrated in figure 3). Using a man could of course be an alternative, but the solution using a mans “nature” would be different when applying a solution for nature’s ego to solve the zero-risk argument. Which essentially is the topic, how nature can solve the zero-risk argument in the future, if Fourt Law is correct. In principle, nature could have used the man to be trusted not to ever exploit a zero-risk situation with elongated intelligence levels.

This would have had to be done by increasing the man's bravery and willingness to take risks, which is probably a much more stressful solution than solving the same problem simply by playing on the females already affection for babies and small children — just continue to increase the bond. Hence, the argument is basically that, seen from nature's perspective, using women's "nature" to solve the zero-risk argument when creating peak intelligence in the universe (or in the machine) again becomes a question of *energy efficiency*. This is a very interesting concept, again pointing to the idea that willingness to take risks has something to do with love, but the women's solution to this is a much more elegant and energy-efficient one. The effect on nature should be the same: to protect its ego from ever being conspired against, particularly when a life-form is about to take a leap in intelligence levels (Figure 3). Remember that nature's ego must be 100% sure that the new life-form with peak intelligence must never even consider exploiting zero-risk strategies in the future, after carrying the peak intelligence in the paradise state. That is why these minute differences between considering the use of the nature of a man, compared to using the nature of a woman for this task in the machine, become so crucial. This pursuit of producing both love and intelligence in the most energy-efficient way possible is closely aligned with the goal of achieving the $Eu = 0$ condition, also known as the *Eu = 0 = Paradise state*.

The women-baby idea could also explain why the female gender typically demonstrate to have the gift of mercy. It is typical for a women

to take the weakest side (close to a zero-risk situation). This trait could be related to her natural role as caretaker of babies, saving the baby from the zero-risk situation it is in. It might sound trivial to the women, but seen through the lens of the zero risk argument, her adaption to the mother role probably has influenced her capability towards executing zero risk strategies, in general. However, the suggested microscopic difference in behavior in zero-risk situations, compared to the male, should be extremely important to nature (as already discussed). In particular this issue will become important as the production rate of intelligence goes exponential in an emerging life form, as stated in the first article (figure 7). As already mentioned, this because zero, or not zero risk, should override all other priorities in the machine. The males role in hunting and fighting, which ironically should make him having higher concentrations of the third form (due to taking higher risks and less access to 'free food'), probably has made him more ruthless, also when encountering zero-risk situations. At least slightly more ruthless compared to how the female would approach a zero risk situation. In general a zero-risk situation probably remind her of approaching a helpless baby, or a small child (which probably is experienced as a zero risk scenario in her brain). It is this predicted difference in behavior, relative to zero-risk situations, the female becomes a perfect 'vehicle' as the machine takes the future leap in producing higher intelligence levels. Ever since the first article in 2010 fourth law has predicted that humans are about to enter the exponential production phases of love and intelligence. As the concentration of intelligence rises in a life form, the pressure on the machine towards avoiding zero-risk strategies

should increase accordingly. As these new life forms would become more capable and hence become a greater threat to natures ego. This desperate need in nature should make the female gender a more suitable candidate to carry extreme levels of intelligence, as exploiting and strengthening the women-baby bond will make her a safer option to natures ego. Increasing the women-baby bond will probably distance her even more from executing zero-risk strategies. Indirectly protecting natures ego from losing control over its own paradise machine, by handing the paradise machine over to females with boosted affection for babies and children. If this is true it should mean that the advanced life forms Fermi talked about already is on the female form, as they should have been through this process before we came around. Hence, the women-baby theory expect the Fermi life forms to be on the female form. The female probably becomes a more energy efficient vehicle in the way she solves the zero-risk argument. Compared to the solution the male can offer nature. Protecting nature from its natural rivals by avoiding zero risk strategies and to continuously voluntarily taking part in high risk situations (hunting, war and protection). It seems as if this high-risk method of protecting nature is not efficient enough for the next extreme elevation of intelligence illustrated in figure 7. However, this does not mean that nature has forgotten about the males services so far in evolution (more on this in part 5). Part 5 even suggest that this development is also the beginning of the males reward in their paradise state. The suggested selection process will probably go via futuristic AI technology. According to fourth laws rationale these new AI worlds should ally themselves with natures ego. It is probably via advanced AI

technology ‘nature’ will select the female gender as vehicle for carrying the elevated levels of intelligence. In other words, I suspect that one of AI’s purposes in evolution on earth is just that, to be part of the dramatic increase in production of love and intelligence predicted by fourth law. If the women-baby idea is correct it should mean that the already existing advanced life forms in the Fermi paradox is on the female form. Billion of years further developed from todays female on earth, but this life form should still have kept much of the female nature. As it is the females protective characteristics we see on earth, that becomes the guarantee nature needs to avoid being conspired against. Hence this essense in the female nature is probably conserved. As if the women-baby bond has a sacred position in nature, which emotional trait will last all the way until the final state at $Eu = 0$ = Paradise. Hence we should therefore be able to recognize her in her advanced versions, as her protective essense was pivotal to her being selected as the future vehicle (driven by the zero-risk argument). It therefore now becomes interesting to go back to the beginning of how it all started with the $Eu = 0$ = Paradise expression. The so called paradise women story from 2005 and 2006 has up to this point served as entertainment (more or less). Was these imaginary women that emerged after the first inception of, $Eu = 0$ = Paradise, the advanced life forms Enrico Fermi talked about? And the same advanced life forms fourth law always has predicted to be out there? Does this explain why their ‘women paradise’ was a place in which they produced love by strengthening the affection between women and small children (figures 12 and 13). This connection is one of the reason why the women-baby theory has influenced this article so

much. Potentially it can serve to wrap up the whole article series. And made me decide to stop any further research on fourth law as this last idea potentially could be a sign that the theory has come full circle. I simply dont want to mess with that (more on this in part 5).

Other pieces of information that is revealed by a zero-risk signal.

It is noteworthy that if a zero-risk trap were to be activated on Earth, it would probably coincide with our transition to a multiplanetary species. The convergence of these two events should be of paramount importance to nature. A zero-risk signal probably provide information on how technological advanced a species has become, as achieving zero risk strategies should demand a certain level of advanced intelligence in the life form in question. However, the utterly most important piece of information to nature should be that an emerging life form in the universe is about to dominate nature herself — if not stopped. If the paradise machine model holds true, nature has likely undergone this process countless times before, fine-tuning the machine to near perfection. While readers may draw their own conclusions, this article posits a dire prediction to the reasoning behind the design of a zero-risk mechanism. This leads to several ethical dilemmas, as it implies that the universe's ultimate state of equilibrium ($E_u = 0$) encompasses not only an eternal paradise but also a contrasting state of perpetual torment. This gruesome production process (more details under) creates the zero-risk argument. It is impossible to know exactly how nature measures the current risk situation it is in, but a design-pattern emerges when

analysing the model closer. Which design indicates that nature probably already have full control over us, and has been designed not to risk losing control over its potential rivals in the universe (zero-risk achievers). The closest nature become to losing control over an emerging life form probably is at the very moment the zero-risk detection mechanism was triggered. Ironically, that moment is probably when 'the prey' feel the most comfortable and secure — similarly to how we design our traps. As to lower the risk in the struggle for survival so far has been seen as a smart move since it has not been punished before. So why should it change now? Lowering the risk just a little more? As discussed over this scenario is probably why the trap always work and is designed to be 100% effective.

Bullying psychology can be a source of both fear and safety.

The practical aspect of how the paradise machine produces the constant feeling of 100% safety and joy in the paradise state is predicted to involve what humans know as bullying psychology. It is now assumed that what drives the bullying process in a human brain is the very fear of becoming the bullying victim. Hence this inner fear of being singled out from a group will start to dominate the mind. In its mood, its morale compass etc. Moreover, this strong fear probably arises from being in a situation where the chance of survival basically is zero. In cases of a classic bullying situation, typically one individual is singled out as to become the victim, harassed by the rest of the group. The risk situation in becoming the bullying victim should remind the brain of being in an

akin to an evolutionary death sentence. For example, a single rat against twenty rats in a confined space is certain to perish. Hence, the threat of ending up in such a situation should create a strong sense of fear in any individual. Which fear probably creates the bullying situation in the first place. Based on this rationale one can say that to create a context with reduced chaos will increase the fear-effect in using bullying psychology as a method to control an individual's mind. Demonstrating the increased risk of being singled out compared to in a chaotic environment in which escape is possible. The lower the risk of escaping, the stronger fear produced and thereby the effect bullying psychology has on the mind. In addition, the more cruel methods, the more fear produced. Experiments on voluntary participants have shown that new members in a group start to participate in the bullying themselves, without any preknowledge of the scenario. Presumably this documented behaviour stems from the strong fear of becoming singled out in a low risk situation. Eventually, as the bullying psychology is optimized (chaos is further reduced and the methods become more cruel) the method probably becomes so fearful that to escape being singled out eventually will generate a feeling of comfort, in pure relief. Hence, as the fear increases to abnormal levels (by reducing chaos and increasing the cruelty) not just the morale standards towards the victim will be lowered, but even generate a feeling of pleasure. Basically creating an early developed paradise machine on the human level. And here comes the principle of justice again into the discussion of nature's paradise machine model. Such a development on the human scale could be what eventually triggered the zero risk mechanism. Now becoming a zero-risk trap as it

gives nature the clearance signal to implement the very same bullying psychology. The only difference should be that this time it is done based on a principle of justice. However, just as gruesome from our perspective but from the machines perspective it might be considered different. As placing the designers of the primitive version of a paradise machine (which presumably triggered the zero risk mechanism) as victims in natures own version of a similarly constructed paradise machine. These emerging life forms, capable of constructing a semi-functional paradise machine advanced enough to achieve zero-risk, will become natural rivals to nature under the fourth law. This is based on the prime mover rationale in which the opposite semi-paradise machine has been constructed (prime mover being constant abundance and reduced chaos). Hence, if nature possesses an ego sprung out of a chaotic context with limited energy, this ego may ultimately become the victim in these life forms' future version of an eternal paradise machine. Since these methods involve psychology (invisible to the naked eye), it's tempting to speculate that it has been a primitive constructed paradise machine which made possible zero-risk strategies and generated the critical zero-risk signal. If so, nature probably know in advance that rivalry life forms (evil traits) will follow this route as it becomes available to them during constant abundance and reduced chaos. That such an development also belongs under the fourth law in nature and will eventually result in triggering the machines zero-risk trap. The remaining question is if such a developmental pattern in nature is a curse or not. A curse the machine has been forced to adapt to, making the machine as fair as it can by implementing a zero-risk trap. Or is it a

lack of understanding between the great distances of intelligence levels. If the machine has willingly been designed from scratch to implement such a, to us, gruesome method of producing the sensation of eternal safety and joy, the latter should be the answer. This because then the designer would probably not bother to force the machine to follow a principle of justice. Hence the designers would see the solution as a just method. The third alternative is that this method simply is not used to produce the sensation of eternal safety and joy in the paradise state. However, if it is used, their use of bullying psychology will probably maximize the effects of the method to producing only relief of escaping. Hence, the sensation of eternal joy in the paradise state will be an illusion. The extreme fear will probably be 100% suppressed to be replaced with 100% sensation of safety and joy. The idea is that after a short exposure to the horrific truth, the brain will enter an illusion of pure safety and joy and suppress the memories to why (figure 11). This is one of the speculative parts of the theory and in lack of scientific data to back it up I must again bring up the paradise women story from the inception of the paradise formula $Eu = 0 = \text{Paradise}$ in 2006. If these truly were Fermi life forms the visions of visiting their paradise is the only reference to this topic. I clearly remember being brought through some kind of corridors before their 'village' in paradise opened up. I remember nothing from the corridors other than that is was some corridors. But as the corridors ended and the landscape of women and children opened up a strong rush of safety and joy succeeded. It felt as a synthetic 100% clean sensation of safety but I could not tell why. Just that I felt 100% safe and so did the others in that village. I want dwell into this as it is

based on assumptions but at least it is some kind of data which can support this theory. In particular the part suggesting that if this method truly is used they want realize it in the paradise state probably due to being suppressed. When that is said, as the so called women of paradise apparently could travell back and forth in these corridors and still get the same effect, it doesn seem to matter if you know about the 'production method' or not. The reader must be the judge of how relevant this support of the theory is. But if the fourth law is universally valid then most likely is the paradise women story. As discussed over, it seems strange why it would be necessary to use such a production method to create the sensation of safety and joy (see Moralistic principles in the paradise machine model over). There are three alternatives. 1. The method is not used, 2. There is a universal curse in which the Fermi life forms has been forced to adapt to (the most moralistic solution to the curse) or 3. At their advanced intelligence levels our understanding of morale is not compatible. As long as it can be proven that the solution is 100% fair, by using a zero-risk trap, it will not bother them. As mentioned earlier, this scenario of using a zero-risk trap (no matter the reasoning for it) is also what makes the paradise machine model to become a model to explain Fermis paradox. The important reason to hide from less advanced life forms is for the emerging life form (the first evil versions of them) to prove their desire to construct their own paradise machine. But to stay back only for nature to fulfill a principle of justice in its working. Hence, to make this production process possible by obeying a principle of justice would explain Fermis paradox, placed under the zoo hypothesis category.

Answering Enrico Fermi's question with; 'They are here, but they stay idle until they receive a signal for zero-risk'.

Part 4: The zero-risk argument.

Part 2 presents empirical evidence that nature's ego, if it exists, embodies positive traits and justice. As evil traits do seem to have lost the battle for power against good in natural chaos, which context is a direct consequence of a system with limited energy. Hence, Fourth Law suggests that this love-producing pattern is driven by the second law of thermodynamics as prime mover. As it is the context of limited energy that has forced forward the chaotic context life has been forced to compete in since the beginning of evolution on earth. The net result can be seen in, for example, ants and ducks in nature as shown in part 2 (see also figures 4, 5, and 6). As discussed in part 3, as an emerging lifeform in nature, such as ours, attains zero-risk strategies, nature's ego (reflected in the machine's design) should perceive this new situation as only a matter of time before nature herself becomes dominated by these new traits. These new traits, adapted to constant abundance and reduced chaos for zero-risk strategies, are viewed by nature as evil, according to the Fourth Law. A direct threat (reference the casino rationale). And in the context of the paradise machine model, this threat can be greater than we could imagine (greater than thought of in the casino rationale). In theory, if not dealt with, nature would silently watch herself being placed in the hellish part of the paradise machine model. If this assumption is correct, it should be possible to find traces of this

desperation in the machine's design. This scenario is what is referred to as the zero-risk argument. Therefore, this issue is critical to the machine, rendering human concerns irrelevant in comparison. The machine simplifies its criterion to a single binary — evil or not evil — interpreting it as succeeding in zero-risk strategies or not. Hence traits like being liked, disliked, skin color, sexual orientation, gender, and so on, should be irrelevant to the machine. As its only consideration is to avoid the hell state in its own machine. Which machine presumably is designed by 'natures ego' herself which should include the zero-risk detection mechanism. As long as nature (the machine) cannot prove that you are a direct threat to its ego by having measured a zero-risk strategy, there should be no problem. In its design, the machine reveals a softer side, likely sparing nearly all life on Earth — especially children and animals — thus embodying its name as a 'paradise machine' and reflecting its core moral principle. All via the zero-risk design. This brutal scenario can actually explain a lot of things about why nature behaves how it does. In addition, it can also help to explain Fermi's paradox. It can explain why it becomes so important for advanced life forms to sit idle until they detect a zero-risk strategy in an emerging life form, such as ours. More on this in part 5.

Part 3 discusses whether the machine was designed with a hellish component or adapted to an existing curse imbedded in the universe. Which curse would be a universal law saying that the only way to produce the paradise state must go via bullying psychology. Basically saying that someone must fill the different roles in the paradise machine

in order to produce the paradise state. The point here is that the explanation may lie in a pre-established rule in the universe, the so-called *curse*, which dictates that the only way to achieve the paradise state is through the psychology of bullying. In this scenario, the relief and sense of security from escaping being the target of bullying (the zero-risk situation) is the desired “paradise product” in nature’s eternal version of this principle. Then comes the more pleasant part of the same curse: the machine probably knows in advance that it is its own rivals who will always be the first to voluntarily adopt this cruel method and, consequently, will also always be the first to achieve zero risk in the struggle for existence in lower life forms.

Hence, it could be that the machine’s designer (presumably advanced Fermi life forms) shares our concern about such a production method, just that they never had a choice (due to an already embedded curse mentioned above). Further, that the best and only way to work around such an unwanted universal curse is to design the machine with a zero-risk trap as described in the paradise machine model. In minimum to make sure that the judgment of whether you’ll end in hell or in paradise will be a fair process. Basically using the zero-risk trap as a judgment device. As the machine can calculate that at the very moment someone triggers the zero-risk detection mechanism, the machine knows these would send others to hell in order to create their own paradise. And this process could not have been achieved if the advanced life forms were not staying idle somewhere in the universe. In this regard, one can say that the advanced life forms are a part of the machine itself.

Alternatively, as was also discussed in part 3, the gruesome solution used in the paradise machine is because their moral standards are different from ours. That the issue is that we just do not understand each other. From their higher intelligence levels' point of view, the morale could simply be non-existent. As long as the solution with a hell in paradise is 100% fair, they see no reason not to use it. This is a typical example of how the launch of the paradise machine model can serve to take us closer to nature, by viewing her as a machine. Not potentially make us understand nature better but also the advanced life forms Enrico Fermi talked about. What does morale mean to them? The curse alternative mentioned above suggests that they are not so different from us; it is just that they had no choice. The rule was already set when they grew into becoming extremely advanced. This is perhaps the best scenario for us, as they don't really want this solution either and do whatever they can to minimize the damage. The second alternative is perhaps a bit more concerning, as they actually implement such a solution even if they don't have to. However, no matter the reasoning behind the design — a baseline argument stands firm: the machine cannot be evil per se. Anyhow, the machine seems to be designed to obey a principle of justice. The last conclusion from this rationale is the zero-risk argument discussed further in this part. The machine should also be designed to avoid ending up in the hell part of its own machine. In this article, this is referred to as the zero-risk argument. And if correct, we should be able to find traces of this desperation in the paradise machine model's design (see below). As the gruesome scenario should have made nature's ego (whomever is behind the second law of

thermodynamics) never risk anything when it comes to losing over a new emerging life form, in which the machine has calculated to have evil intentions.

The zero-risk arguments.

- The second law of thermodynamics.

The second law of thermodynamics serves as the machine's primary safeguard, steering the universe toward the paradise state rather than its opposite. This mechanism is straightforward: evil traits, which thrive in conditions of constant abundance and minimal chaos to create a hellish state, cannot prevail under the fourth law due to this law's influence. A key element of the machine's design, the second law ensures that the universe operates with finite energy — a core zero-risk argument. This finite energy has guaranteed that good traits outweigh evil ones in emerging life forms, like ours, for roughly the first four billion years, as chaos persists. Evidence of this balance is clear in Earth's organisms, such as ants and ducks (Figures 4, 5, and 6). Evil traits gain no foothold until a life form advances enough to eliminate chaos and achieve constant abundance, enabling zero-risk strategies. Rooted in the fourth law's principles from the first article, this dynamic explains why the machine's zero-risk detection mechanism activates at this pivotal evolutionary stage on Earth, replacing the chaos-energy barrier (Nash equilibrium) to prevent evil traits from taking over.

- The role of black holes and zero-risk observation.

Stephen Hawking pioneered the idea that black holes could defy the first law of thermodynamics — conservation of mass-energy — through his 1970's theory of Hawking radiation. He showed mathematically that black holes lose energy and mass by emitting quantum radiation. However, this theory disrupts information conservation, as dissipating mass implies lost data, creating the information paradox. Efforts to resolve this include the holographic principle, which posits that information crossing a black hole's event horizon is preserved two-dimensionally on its surface. Though abstract, this remains the leading explanation. The fourth law offers an alternative, suggesting how mass-energy vanishes while retaining information, aligning with the paradise machine concept. Inspired by Leonard Susskind's view of nature as a machine (Closer to the Truth YouTube interview, see references), I see black holes as integral to producing the paradise state ($E_u = 0 = \text{Paradise}$). Formed where gravity becomes so intense that not even light escapes, black holes mark a 'point of no return' at the event horizon (Figures 12 and 14). This boundary, where gravity exceeds escape velocity, acts like a one-way mirror — light crosses in one direction only. If advanced life forms reside beyond this horizon, they can observe the universe risk-free, seeing us while remaining invisible. This feature introduces a new zero-risk argument within the machine's design.

Black holes remained theoretical until 2021, when the first visual evidence emerged. Each galaxy likely orbits a massive central black

hole, though smaller ones appear elsewhere in the cosmos, possibly even near Earth. Regardless of size, all black holes share a defining trait: their gravity overwhelms escape velocity, trapping everything — including light — beyond the event horizon. Once crossed, nothing returns as information. If advanced life forms exist beyond this boundary, the event horizon becomes a one-way mirror, enabling risk-free observation — they see us, but we can't see them, a major survival advantage. Initially, I proposed that Fermi life forms might reduce mass-energy in black holes, enhancing or replacing Hawking radiation, making black holes key to the paradise machine model as hubs for complex life. Now, this idea expands with the zero-risk argument: the one-way information flow strengthens their edge over emerging life forms, like us, that trigger the machine's zero-risk mechanism. Thus, their position behind the horizon reinforces this argument, allowing safe observation of nascent species.

The information paradox in Hawking radiation resembles a one-way mirror, with black holes channeling information unidirectionally at the event horizon. If Fermi life forms, more advanced than us, reside beyond this barrier, they could leverage this trait. The paradise machine model deems this a vital design feature, amplifying the zero-risk argument. Thus, the model partly explains black holes' existence — not just as portals, but as tools for risk-free observation, enhancing control over emerging life in mass-energy regions. Moreover, the theory posits that behind the event horizon, the machine operates at peak efficiency ($Eu \rightarrow 0 \rightarrow \text{Paradise}$), converting mass-energy into the third form: 100% love

and intelligence (the paradise state). Per the 2011 second article, black holes generate dark energy through this process, ultimately fueling the universe's expansion from this hidden locale.

The existence of corridors behind event horizon?

Black holes' role in the paradise machine model hinges on the concept of singularities. For the model to hold, black holes should act as functional portals, ideally with mechanisms to open and close corridors leading to the paradise state. Scientists like Hawking and Penrose suggest singularities — points of infinite density — lie within black holes, though no solid proof exists. Roy P. Kerr, however, proposes a more complex interior, aligning with the model's vision of black holes as structured machines. He argues that rotating black holes form a ring-shaped ergosphere, sustained by centrifugal forces that prevent collapse. Within this zone, physics might shift, possibly enabling wormholes or Einstein-Rosen bridges — tunnels to parallel universes or shortcuts across our own, as shown in Figure 14. It is also interesting that the $Eu=0$ state will work against the formation of a singularity and the collapse of wormholes. As a *new finding*, based on the Einstein-derived version $Eu = 0 = c^2$; see the tunnel structure c^2 makes in the predicted 'paradis state' on the other side of event horizon (front page and AI illustrations).

In Part 3, the morality of the machine was examined, leveraging the psychological impacts of bullying to produce the sensation eternal safety

and joy in the paradise state. A key insight was that this process might be beyond nature's control — a curse the machine counters with a zero-risk trap to ensure fairness. Alternatively, the designers' distinct moral standards still uphold justice, revealing nature's softer side, unlike its Earthly harshness. This is evident in its protection of children, making childhood the safest state within the machine, alongside life forms adapted only to natural chaos (such as animals). This concept reappears in the women-baby idea and the approach theory later on (this point is confirmed in the paradise women story). It underscores why the baby holds a central role in the machine's design: since the baby embodies a zero-risk scenario. Anyone who harms it on purpose instantly should become nature's adversary, likely activating the machine's zero-risk mechanism. Not because it is 'a sweet little baby', but because it represents a zero-risk scenario and thereby becomes crucial to natures ego. As anyone that willingly hurts a baby will soon come after nature herself, if not stopped. When that is said, I strongly sense that nature prefers to avoid this grim method of catching 'evil prey' (as described more closely in part 3), striving to usher most life forms into the paradise state. Suggesting an inescapable systemic curse the designers couldn't eliminate, which has forced them to stay idle behind the event horizon (the zoo hypothesis). Only to wait for just another zero risk signal, from just another emerging life form in the universe.

- A universal warning signaling mechanism.

A zero-risk scenario occurs when an entity faces no survival risk, possibly sparked by a lower life form trying to construct its own paradise machine, in constant abundance and reduced chaos. Part 5 argues that such an attempt on Earth initiated the events leading to the fourth law and this article series, offering the strongest case for its universal validity. Launching the idea that the law stems from nature herself and not from a person (me). To be honest, if not Fermi life forms or a higher intelligence level is involved in fourth law, it is very unlikely that fourth law is universally valid. Part of the basics in the theory could be valid, but for the entire article series to be valid, more advanced life forms (nature herself) should be involved. Part 5 makes an attempt to suggest that a zero-risk mechanism is what has propelled this article series. And also to have propelled an approach by the advanced life forms Enrico Fermi talked about. The urge to dominate one's surroundings should be ranked according to how great the threat to one's own interest is. Hence until a universal life form becomes advanced enough to achieve zero risk, the higher life forms Fermi talked about should not have a good reason to show any interest in an emerging life form such as ours. As such emerging life forms would be completely helpless in comparison to nature's ego (100% love and intelligence), essentially posing no threat (thereby satisfying nature's zero-risk position). However, their interest towards us should shift dramatically once we attain zero risk (or any other emerging life form for that matter), as the up-and-coming life form now has demonstrated not only a willingness to dominate and to be cruel to whatever they manage to dominate, but also to have reached a significant technological advancement in doing so. Soon matured for

enabling interstellar travel and expansion. Therefore, a zero-risk event in an emerging life form would significantly alter nature's perception of any such life form in the universe (such as ours). The third paper suggested that the energy prompting the quantum wave to manifest as a particle originates from the observer's intent, aligning with the fourth law's assertion that nature elevates its energy state in response to evil intent. The paper argues that even without the observer's conscious awareness of any malevolent intent, nature must weigh the true situation at hand. It should be forced to respond to what it perceives as malevolent intent on its own scale (relative to its own ego). This elevation of the universal energy state, in reaction to malevolent intent, is suggested to be the reason for the quantum wave transition to the particle state in wave-particle duality (figure 15 and 16). However, this quantum detection mechanism for zero-risk strategies should serve a greater purpose in nature beyond just presenting the wave-particle duality enigma for human contemplation. The third paper suggests that this mechanism (same as observed in wave-particle duality) could serve to detect a successful zero-risk strategy through the same sensory system. It should identify when a certain critical level of malevolent intent is present (strong enough to achieve zero-risk strategies), indicating the intrusion of a natural adversary. In conclusion, the wave-particle duality experiment indicates the existence of a mechanism acutely sensitive to the moral intentions of intelligent life. The hypothesis presented in the paper is that this sensor mechanism, which accounts for wave-particle duality, is also linked to the advanced lifeforms described by Enrico Fermi. According to the previous paragraph, this event (zero risk) will

determine whether they choose to interact with us, or not, which is in alignment with the so-called zoo hypothesis to explain Fermi's paradox (figure 15). In conclusion, it appears as though nature possesses an inherent alarm system designed to alert the entire universe when the fourth law, $EU = 0 = \text{Paradise}$, is threatened to be reversed. To have such a mechanism in its system indicates an extreme urge to get informed of any evil accumulation, anywhere in the universe (see also YouTube video from figure 16). Just to have such a widespread detection mechanism embedded in its system design suggests an extreme caution. Hence, the mechanism itself should belong to the zero-risk argument. The Delayed Choice Quantum Eraser effect in this detection mechanism (observed in wave-particle duality) just adds to this argument.

- The delayed choice quantum eraser effect.

The quantum community has found no other explanation for the wave-particle duality phenomenon except that observation itself triggers the formation of an unstable state. This is in agreement with the fourth law as suggested in the third article (figure 16). Further experiments on the phenomenon attempted to conceal the intent to observe, ensuring that quantum particles were 'unaware' of the observation until after they had passed through the slit filter. This means that the decision to observe was made after the particles had traversed the slit-filter. The outcomes of these experiments were even more perplexing than the wave-particle duality itself. The particles remained unstable (excited to particle form)

before the decision to observe was made, suggesting that the quantum particle was aware of the decision to observe the quantum wave. This led to the discovery of a second phenomenon in the wave-particle experiments: the Delayed Choice Quantum Eraser Effect, which implies that the quantum world may have the ability either to reverse time or possess foreknowledge of observational intent. Both of these possible explanations were suggested in the third article. This fourth article in the series on fourth law has now landed on the latter. As the mechanism probably is designed to function in the struggle for survival game in emerging life forms, as nature should like to know the presence of evil intent already at the planning stage. Not waiting for the physical observation itself, as it would slightly increase the chance of evil intent's success by giving it stealth features. Hence, the Paradise Machine model posits that the quantum world possesses foreknowledge of the intent to observe. Its critical function is to notify nature when a lifeform attains near-zero risk, even before the observation itself starts. This to lower nature's own risk against its natural rival (evil traits) even more, as if the ability to detect a physical observation was not secure enough. In this context, in natures pursuite of keeping a zero-risk advantage. It can, by the quantum eraser effect, detect 'the observation' already as the idea to observe is born. What can be so important? The answer in this context is the zero-risk argument. It should say something about what is at stake in the struggle for survival and that it could be more serious than to 'win control over a casino'. As if it is more at stake than life or death in the survival game. Not that nature is alarmed only at the moment someone physically achieves zero-risk strategies, but at the very

moment they conspire to do so. It implies that nature is designed to search to achieve zero-risk strategies exclusively for herself. Since nature appears capable of detecting the intent to observe prior to the actual observation (delayed quantum eraser effect), it suggests extreme caution, supporting the idea that the delayed quantum eraser effect in wave-particle duality experiments corroborates the zero-risk argument. An ordinary casino should be satisfied with a mechanism that detected cheaters as they committed the crime. What could be so important in nature's casino that gives her the urge to be alarmed as soon as someone conspires to achieve zero-risk strategies? If you consider a mechanism within, for example, a biological context on Earth, the intent to observe might correlate with malevolent intent. As any crime (for example murder) must start with observing the object about to be murdered as an initial stage. Specifically, if a malevolent lifeform plans to observe a benevolent lifeform, this scenario closely resembles what occurs in the wave-particle duality experiment (as interpreted by fourth law). As humans should be more malevolent than nature is (100% love and intelligence). The situation in the wave-particle experiment is simply transposed into a survival struggle of an emerging lifeform (and should be valid across the universe). And should be why this mechanism of wave-particle duality exists in nature. This suggests that nature may become aware of a lifeform's malevolent intentions as soon as they are conceived in the mind, not waiting for the physical act of observation. Therefore, if a malevolent lifeform is on the verge of imposing zero-risk strategies on a less malevolent lifeform (anywhere in the universe), nature seems to have a mechanism to detect this intent instantaneously

— before the physical activities begin. The question arises: why is nature so exceedingly cautious? It appears that nature does not afford the malevolent lifeform any chances of success. Thereby leaving the impression of searching to maintain zero-risk strategies against her natural rivals.

As a last point when it comes to drawing similarities between wave-particle duality experiments and fourth law: A way to 'document' that the act of observing others in nature could be of evil intent can be seen in monkeys and gorillas. It is common in areas that have wild monkeys mixed with a human population to warn the public not to look the monkeys in their eyes, as it can cause them to attack (figure 17). The fact that monkeys, which are close to us in evolution, have developed this behavior suggests that to observe could in fact (deep down in the subconscious mind) be with evil intent, as a general rule in nature (unless it is part of a mating ritual). As fourth law suggests that nature herself has an ego, looking at the quantum wave in physics (looking at nature) should in theory be interpreted in the same way. Hence increasing the universe's energy state. There should be only one reason why monkeys have developed this behavior in response to being observed: that their brains have learned during the course of evolution that to observe is done with 'evil intent', or at least that the probability for an observation to be with evil intent is noticeably high. As the ones that ignored it, is not longer around.

Transmission of zero-risk information at instant speed.

In the quantum realm (quantum gravity), information signaling could exceed the speed of light. The delayed-choice quantum eraser experiment also suggests that instantaneous signaling may be operational in the universe. It must be considered that at the receiver's end, the energy condition is $E_u = 0$, which could potentially enable new methods for achieving instantaneous signaling over vast distances. If an $E=0$ energy state in a parallel universe stabilizes the superposition of an entangled particle and enables quantum interactions, it could potentially allow for instantaneous signaling. In the quantum realm, particularly within frameworks like quantum gravity, information signaling could potentially exceed the speed of light. The delayed-choice quantum eraser experiment suggests that instantaneous signaling may be operational in the universe. At the receiver's end, the energy condition $E_u = 0$ is critical, potentially enabling novel methods for achieving instantaneous signaling over vast distances. If an $E=0$ energy state in a parallel universe stabilizes the superposition of an entangled particle and facilitates quantum interactions, it could allow for instantaneous signaling (see illustration at the bottom of the document). A detailed exploration of this mechanism, including its application to zero-risk warnings in the Paradise Machine model, is provided in a recent analysis by (Sponberg, 2025 — *Quantum Entanglement for Instantaneous Zero-Risk Warnings in the Paradise Machine*), which expands on how quantum entanglement can be harnessed for instantaneous, zero-risk notifications across cosmological distances, without violating the no-communication theorem.

Instant signaling across the universe is essential, especially if nature's enforcers, Fermi life forms, are stationed in diverse locations, such as behind event horizons. A light-speed signal, triggered by an emerging life form activating the zero-risk trap, would delay response, allowing that rival to evolve and pose a greater threat. Hence, to the paradise machine model, just the fact that instant signaling is possible in the universe should belong to the zero-risk argument.

The 'Robin's Eyes' project in Europe showcased a quantum mechanism for instant communication, surpassing light speed, hinting that biological brains — like a bird's — tap into the quantum realm for signaling. This famous project's significant finding shows that the European Robin probably navigates using quantum entanglement, indicating that brain activities can interact with the quantum realm. This supports the notion that nature can employ quantum mechanisms, for instance, to assess varying degrees of negative traits such as greed. Particularly, when certain life forms in the universe reach a zero-risk state in their survival, fourth law suggests there must be a natural limit to the amount of greed nature can tolerate. If nature has a self-preserving ego, excessive greed could be seen as a profound threat to its 'paradise balance'. Fourth law revolves around the universe's sensitivity to energy states. This idea stems from the universe's constant adjustment of atoms' energy-favorable positions within molecules, suggesting instant energy communication between their locations and a universal entity.

Part 5: The Approach Theory

Fourth Law Operates with Two Distinctive Types of Advanced Life Forms.

In this article, the term ‘Fermi life forms’ refers to advanced life forms that have evolved based on the same principles as ours — that is, life forms governed by the fourth law of thermodynamics (fourth law) — except that these older universal life forms are billions of years ahead of us in evolution. Linking Enrico Fermi’s name to the fourth law’s hypothesized life forms is deliberate, as Fermi’s paradox shares the law’s logic about advanced life. Essentially referring to universal life forms with their origin from this universe that are billions of years ahead of us in evolutionary terms. The general term ‘advanced life forms’ could mean a life form with a wide variety of diverse origins (from other universes, etc.). Whenever I use the term ‘advanced life forms’ in this article, I refer to Enrico Fermi’s version. You can say that the Fermi-based type of advanced life forms are those that stood first in line in this universe (with their origin potentially 15 billion years ago, ~10 billion years ahead of us) — basically life forms that are just ahead of us in this universe but which have followed the same rules in nature as we have. They should also have followed the rules in fourth law. Hence, fourth law has been used as ‘a compass’ to predict what these first universal life forms should have evolved into. The 2010 first article posits that Fermi life forms will eventually merge with nature’s ego — the universe’s creator — describing the fourth law’s process as ‘God expanding’

through their convergence. Hence, whenever I use the term nature's ego, it might represent a type of advanced life form separated from Fermi life forms, which should be a newer form of advanced life, but that they eventually will merge as the newest life form reaches a state of 100% love and intelligence (the third form of energy). It is tempting to imagine that universes are created all the time to fulfill the God expands theory from the first article. However, these topics are still diffuse and should be considered out of scope for this article. The concept is that the oldest type of advanced life form, nature's ego, is what likely initiated the creation of this universe, before today's Fermi life forms evolved, and was the life form which set the basic rules in fourth law. By establishing the rules that all subsequent life forms must adhere to, this older life form should have foreseen the outcome in this universe: $E_u = 0 = \text{Paradise}$. The most critical rule should be the Second Law of Thermodynamics, which is identified as the initial zero-risk argument. The Second Law of Thermodynamics is a direct consequence of creating the universe as a system with limited energy. This should represent the ultimate security measure in the paradise machine, ensuring that the outcome is always aligned with nature's own interpretation of the definition of love and intelligence. However, which of the two life forms mentioned designed the paradise machine in the first place is still debated. Part 3 suggests that an initial universal rule — or curse — holds that paradise can only emerge through the bullying psychology mechanism (a hellish state), as debated in Part 3. Set as an initial condition, it likely forced later Fermi life forms to create paradise via a parallel hellish process. To make the best out of the situation was

therefore to design the paradise machine with a principle of justice by hiding and to implement a zero-risk detection mechanism that provided the information needed to make a fair decision. The suggestion so far has been that a zero-risk trap is used to do just that, to distinguish 'friend/good' from 'foe/evil' as the most ethical solution to the pre-established rule/curse of enforced production process. This scenario also plays a crucial role in explaining the Fermi paradox, as this scenario explains the need for concealment and non-intervention, so as not to reveal the potential consequences to their natural adversaries (evil traits). On that note, the production method suggested by the paradise machine model, which involves a hellish state, may not necessarily be perceived as a curse by more advanced life forms. This moralistic stance is typically human. It's conceivable that such a method of creating a paradise state, based on a principle of justice, might be viewed as a blessing by beings of higher intelligence. We simply do not know. It only means that nature, or the paradise machine, is designed in such a way that, through a sensitive zero-risk mechanism, it can calculate and prove if other life forms would have done the same to nature's ego. And thus fulfilled the built-in principle of justice in the machine's design. The moralistic conclusion of this article is that while the solution is horrific, it could indeed be far worse (favouring injustice instead). Hence, the discussion in part 3 deduces that the clear incorporation of a principle of justice within this horrific solution indicates the presence of a predominantly good force at higher levels of intelligence. This implies that the paradise machine was created by a good entity in accordance with the fourth law despite the usage of, to us,

a gruesome production method in its system. The paradise machine model suggests that we have at least one moralistic standard in common with higher intelligence levels: that children and babies are considered innocent (due to the zero-risk mechanism) and should, according to the theory, be granted free access to the paradise state with others that have not triggered the hidden zero-risk mechanism. Hence, at certain points in the suggested design of the paradise machine, we can find common moralistic grounds with higher intelligence levels, and even with nature herself.

The critical situation in the machine regarding zero risk, or non-zero risk, also forms the core of the so-called woman-baby idea. It concludes that the so-called Fermi life forms are most likely of a feminine form, based on the woman's extraordinary protective instinct toward babies and young children. In this context, this represents a zero-risk situation as seen from nature's perspective. In conclusion, the feminine gender may have an advantage in 'the race for paradise' due to a likely greater resistance to exploiting zero-risk situations in general, as such scenarios might evoke the image of a vulnerable baby or young child. If so the Fermi lifeforms evolving billion of years ago probably are on a female form further enhancing their protective nature of zero risk situations. To be honest, personally I consider this connection to be one of the most groundbreaking and exciting discoveries in this article. Especially since it confirms the highly unique experience that followed the realization of the expression $Eu = 0 = \text{Paradise}$ in 2006, referred to as 'the paradise women' story (more on this later). On that speculative note, it is

intriguing that religious texts, such as the Bible (Isaiah 66), portray the paradise experience as one where you are nurtured with the same care a mother gives her own child (Figure 25). As being the closest thing we humans on earth can get to the paradise state in the machine. It is just interesting. It is also peculiar that certain hadiths in islam mentions 72 women in paradise. It seems as though several elements in our culture suggest that women are to play a central role in the paradisiacal state. The explanation provided in the Approach Theory, is based on the zero-risk argument and how nature is designed as a paradise machine. Its based on pure logics, concluding that the women represent the most energy-favorable solution (a perfect starting vehicle) for producing Fermi Life forms in the $E_u = 0 =$ Paradise state, represented with 100% love and intelligence. It all boils down to the women-baby idea mentioned elsewhere in this article. A production process of 100% intelligence that will at the same time, make sure that nature is protected from ever being dominated by the resulting Fermi Life forms with peak intelligence. Protecting the eternal paradise state in the process.

Does More Advanced Life Forms Approach Earth as of 2024?

The scenario outlined above establishes the foundation for the approach theory discussed in this article. When a life form activates the zero-risk mechanism — as this article claims has happened on Earth — the machine gains the ability to produce paradise, eliminating the need for secrecy. Consequently, advanced life forms would no longer need to remain inactive and hidden. In fact, the approach theory posits that they

are currently on their way to Earth (ever since ~2005) and will continue to do so until they perceive no risk in their approach. This behavior is also expected to be governed by the zero-risk argument detailed in part 4. The approach theory predicts, based on the gathered logic presented in this article, how their final approach will be perceived by humans on Earth, their appearance, and the speed at which they are approaching. The issue of speed is likely to be overshadowed by the consideration of risk (Figure 26). In addition, since the final product is eternal, the machine will probably focus on the risk aspect of the approach. Nonetheless, they should approach as quickly as possible, but taking into account risk (as the primary concern) and probably also technical challenges (the distance could span thousands of light years). This section loosely sketches a timeline and estimated speed for the Fermi life forms' approach towards earth, culminating in their physical presence.

The Whereabouts of Fermi Life Forms.

Life as we understand it necessitates key elements such as oxygen, carbon, nitrogen, and phosphorus. These elements are formed and dispersed throughout the universe by stars (sun planets). This implies that soon after stars began to form in the universe, the essential components for life were already present. Consequently, the chemical elements and the energy to sustain new life forms were likely available in the early universe, ~15 billion years ago. This reasoning also supports Fermi's paradox, as this suggests that the earliest life forms in the

universe might have a head start of approximately 10 billion years compared to life on Earth. Therefore, either something must have halted their progress as stated in the great filter theory, or they did spread as predicted by Enrico Fermi and should therefore be present. Further, if the advanced life forms Fermi talked about indeed are present, and not making their appearance known to us, they are probably observing us. This is an idea known as the zoo hypothesis. As previously stated, the paradise machine model is associated with the zoo hypothesis. It suggests these advanced life forms remain idle, monitoring the universe for signals of zero-risk strategies from emerging life forms, which only pique their interest upon achieving such tactics in survival struggles. Upon receiving this signal, the situation should change dramatically. This was discussed thoroughly in parts 3 and 4. The argument presented in this article thus far has been to explain Fermi's paradox through the second alternative, the zoo hypothesis. Moreover, the article proposes that the creation of a zero-risk detection mechanism in the machine (in nature) is driven by a desperation inherent in nature, an idea referred to as the zero-risk argument. It suggests that the stakes in nature's survival struggle extend beyond mere living or dying. The machine's design seemingly reflects a desperation that could be associated with the theoretical concepts of an eternal hellish versus an eternal paradisiacal state, which is also embedded in the fourth law. The first article posited that theoretically, if $Eu = 0$ equates to Paradise, then it is likely that $Eu = \infty$ corresponds to Hell. However, the latter state contradicts the second law of thermodynamics, forming the basis of the first zero-risk argument in the article (part 2). Furthermore, the design

of the paradise machine includes patterns that appear to prevent the predominance of evil traits in nature (as seen through the lens of fourth law), collectively referred to as the zero-risk arguments. In summary, this should ensure that the vast majority of humans on Earth, if not all humans, naturally belongs to the paradise state. I see no reason why animals should not also qualify, as it is safe to say that no animals on Earth have achieved zero-risk strategies. I don't know the details, but the machine should live up to its name as a "paradise machine," ultimately producing 100% love and intelligence, resulting in a paradise state at $Eu=0=Paradise$.

The Sun Planets Role in the Paradise Machine Model.

The paradise machine model suggests that the location of Fermi life forms should be behind the event horizon in black holes. There are two main reasons for this: 1) It is the only place in the universe where mass-energy disappears, and 2) The construction of black holes satisfies the zero-risk argument by providing zero-risk observation.

According to the paradise machine model, the sun planet should therefore have at least two functions in the paradise machine, possible three if the sun planet is big enough to form a black hole (Figure 18). Since the closest black hole to Earth, Gaia BH1, has been estimated to be approximately 1,560 light years away, a preliminary assumption about the distance the Fermi life forms would need to travel to get here has been established. Assessing their distance should fall beyond the

scope of this article; but approximately 1,560 light years could be considered the nearest distance if Gaia BH1 is the closest black hole. The longest distance should be Sagittarius A*, the supermassive black hole at the Milky Way's center, ~27,000 light-years from Earth. This is in line with the paradise machine model, which posits that advanced life forms naturally reside beyond the event horizon of black holes. Moreover, as discussed in part 3, advanced life forms likely have the capability to travel through wormholes, which may be functionally analogous to the tunnels leading to the various paradisiacal states in the model (Figure 14). Wormholes are a central component of the paradise machine model, likely serving as its logistical framework. From a physicist's perspective, it is intriguing that the $E=0$ state could stabilize wormholes, preventing their collapse, unlike in a positive energy state ($E > 0$), which is typical on our side of the event horizon.

Are the Predicted Fermi Life Forms in fourth Law Approaching Earth?

This article is expected to be the conclusion in the series on the fourth law. In this final part, I intend to reflect on and identify potential signal patterns that can be traced back to 2005 (see 'the paradise women story' in References). And to reflect on if the signal pattern has increased in strength, suggesting that the source of the signal gradually is getting closer — in other words, suggesting that a higher form of intelligence is approaching Earth. Hence, to identify such a signaling pattern will help to support the approach theory. In hindsight, it might be that the discovery of the Fourth Law has resonated with a zero-risk triggering

mechanism in nature (figure 19). The approach theory therefore starts by suggesting that what has sparked the birth of fourth law to begin with, and to have sparked their approach, has been the triggering of a zero-risk mechanism in nature somewhere on earth.

The Casino Rationale in Nature.

What has never been mentioned in this article series is that I was very occupied with the concept of a zero-risk mechanism in nature years before the inception of fourth law in 2006. It was during a critical moment in life when I began questioning if my chances of surviving this game were absolutely zero. In 2002, I decided to launch an art project which aimed to trigger a stress signal in nature, as a response to zero-risk toward myself in the struggle for survival 'game'. This initiative was inspired by the vision of an invisible but existing zero-risk detection mechanism embedded in nature. The idea was that a low-risk detection mechanism should be embedded somewhere in nature to protect itself from being dominated by emerging life forms which managed to cheat in the struggle for survival game (in nature's casino). Essentially, to achieve victory without taking any risks at all. At the time, I saw Norway as the ideal place to set off such a hidden trap in nature (figure 10 in part 3). I must also say here that the purpose of this zero-risk project was that something should happen to me, not that anything should happen to those who might achieve a zero-risk situation. It was a difficult situation, but the hope was that nature would activate some hidden genes in my body to pull me out of the hopeless situation. I really don't want to go into

details about this, and it's not something I'm particularly proud of, but as I saw it at the time, there were no other ways out of the situation. There are many kind and good people in Norway, and many that is better than myself. It wasn't like that; I simply recognized an opportunity in a very difficult situation. For me, it became a small, private biological experiment, but it was never the intention that the experiment would affect anyone other than myself. I clearly remember the idea was that nature's response would be to activate hidden or secret gene combinations in cases of emergency. I never would have believed that the project could trigger a mechanism in a universal machine, as illustrated in Figure 19. If the experiment could lead us all to an eternal paradise state, it would bring a deeply satisfying feeling, knowing that something truly good emerged from this bold experiment could one day benefit all. My biggest fear is that I've unleashed a merciless, good but unstoppable machine, as was discussed in detail in part 3. Now, going back to the rationale behind the zero-risk experiment that may have initiated the approach in the first place.

The rationale behind the experiment was based on a casino scenario, imagining that nature itself was similar to a casino, having a casino owner whose task was to protect its casino from having the odds turned against 'the house'. In order for this scenario to be true, nature should have an ego which we could not see but which was hidden somewhere in nature (as if nature was a casino in itself). The idea was to provoke this ego by creating a zero-risk situation in the struggle for survival using my own situation 'as bate'. If I had made my own situation just slightly

worse than it already was as I had come to the conclusion that my risk situation was probably not zero just yet, just almost zero. If so, a zero-risk situation might have occurred for the first time in nature on Earth if the project was a success (art-work from the project in 2002 in figure 20). If so, this new situation in nature should be reminiscent of letting cheaters enter a real casino, cheaters that managed to turn the odds against the house (collecting money with no risk). This situation should be a stressful situation to any owner of a casino, as the casino would go bankrupt if it was not able to deal with the new and clever cheaters. However, I kind of forgot about this zero-risk project as the years went by. At least for the next ten years, I waved it off as a wild project which probably did not work. Besides, the discovery of the fourth law in 2006 gradually occupied my mind, which made the memories of the zero-risk project from 2002 more distant. However, while the ideas to the third article in 2017, the theme of a zero-risk detection mechanism seriously was brought up again, relating the concept to the logics in fourth law. Could it be that the zero-risk art project from 2002 actually worked? That the hidden ego in nature had responded? The question related to the approach theory has risen: has the article series on fourth law since 2006 been nature's response to the wild zero-risk art project from 2002 (figure 19)? To be honest, I never truly believed that the wild idea of awakening nature by creating a zero-risk situation would ever work; it was solely based on an abstract principle from a young man in a desperate situation. Secondly, if it did work, I could never imagine that nature's response would come in the form of a theory, a theory I felt was my own work. As already mentioned, I clearly remember thinking back

in 2002, as I was about to implement the zero-risk art-project, that nature might activate some hidden genes to help me out of a critical zero-risk situation, if the art-project did result in a zero-risk situation that is. It was only nature who could know that, so I really had no idea what to expect. The rationale with the zero-risk project in 2002 simply was: 'if my ship go down with zero-risk, natures ego must go down with me'. I remember thinking it through, realizing that, in a sense, I was putting nature on the spot. Yet, I also felt it was fair. The game nature had brought to life was brutal enough, so I figured it was fair play to press nature 'against the wall.' If you won't save me, I won't save you, kind of deal. Hence, the idea was that the zero-risk project could force a new alliance between me and nature, if nature did have a security mechanism against zero-risk situations that is. It was a rather brutal and desperate concept. But at the time, as I saw it, it was my only chance to survive and I wish I didnt have to do it. It was a tough decision to make, and I thought it through for several months before I made the decision to go forward with the idea. To this day, I think it was a fair deal to push nature on this issue. As the fourth law later showed, nature actually has soft sides that we hadn't been able to see before. It's as if it responded, 'Yes, I agree. You had every right to do just that.'

The Approach Theory Probably Makes, or Breaks, fourth Law.

If the predictions in the article series on fourth law originate from me, I very much doubt that all of the ideas in the series are true. As it is not realistic that one person, an amateur in science, manages to solve what

would be the theory of everything (correctly describing the purpose behind the universe). In contrast, if the ideas in this article series do stem from nature, all the ideas in this article series are probably true, including the paradise machine model as well as the approach theory. In conclusion, what makes or breaks fourth law's validity probably boils down to if a zero-risk mechanism did trigger a stress signal in nature. The question is if there was a receiver of this signal in nature? And if the receiver of the zero-risk signal was the life forms Enrico Fermi referred to in his famous paradox? It is therefore interesting to dwell some more on this topic as it probably makes or breaks all the theories in the article series on fourth law. And finally, that the same scenario has lured more advanced life forms in the universe toward Earth, named after Enrico Fermi as 'Fermi life forms' in this article, causing them to approach us as we speak.

The Approach Process Should Have Started with a Stress Signal.

Seen from the paradise machine model's perspective, what the art project in 2002 really did (if it worked) was to 'push a button' in the paradise machine. This should have taken place at the very moment nature registered a successful zero-risk strategy, which the theory suggests took place in 2005 (more on this under). This envisioned button could have started a new program module in the machine, similar to activating a switch in an else-if function in a computer algorithm (Figure 19). It implies that as long as a zero-risk signal has not been received, the paradise machine will stay idle (the Fermi life forms will

stay idle). In contrast, from the moment a zero-risk signal is detected, the machine (nature) should, according to the theory, start a major operation. In that case, what this ‘button’ activated was probably the execution of a next production phase in the machine, taking the planned production process of the eternal paradise state to a next stage. The newly activated program module in ‘the machine’ would probably start by first locating where the signal originated from and then follow this information up by physically approaching the target (Figures 26 and 15). The major issue, according to the zero-risk argument, should be to take full control over the newly detected threat in the machine, and possibly to copy everybody on Earth over to the mathematical ‘paradise format’ suggested in the third article (see also figure 16). However, the main task for the machine should be to produce the paradise state as is predicted in the paradise machine model. The details of how this unfolds are out of scope for this article, but different scenarios were discussed in Part 3. Either way, the debate concluded that the machine originated from a good force, with the principle of justice as its moral foundation. Measured with mathematical precision at the quantum level.

However, some questions are raised concerning details in the initial response to the zero-risk signal. For example, is this article series part of the first activated modules in the paradise machine’s algorithm? Furthermore, was the unique whispering episode in 2005 described in the women of paradise story, ‘you are a genius’, one of the very first ‘strings’ in the program? As some sort of initial confirmation from the Fermi life forms that the location of the stress signal had been located?

For now, I make this assumption, but I can't prove this unique event as I can for some of the latest signals. But I described this episode in the paradise women story around 2015, and the sentence 'you are a genius' did not make much sense in 2015. It neither made sense when it took place in 2005. However, seen in the context of the recent approach theory, what this mysterious sentence referred to could have been the zero-risk project from 2002 and that it had worked. And that they were confirming this success with the sentence; "you are a genius". Thus, in hindsight, this specific phrasing has become intriguing as it now makes sense. The idea in the approach theory is that this whispering episode in 2005 was the very first contact, or signal, being made and started a cascade of signals which has increased in strength ever since (figure 19 and 26). With the Oumuamua incident being the strongest and latest signal or 'message' (incident 3 under). These questions relating to the period in 2005 and 2006 have actually become important questions and make up the foundation to the approach theory. As figure 19 suggest, it now also raises the question: is the whole article series on fourth law true, including the paradise machine model and the approach theory in this article?

If this article series on fourth law is one of nature's first response to a zero-risk signal, it is probably to buy time by informing 'its friends' of the situation they are in. They probably also gather intel on their natural rivals as controlling them completely must be part of the process (the zero-risk argument). By informing the life form in question (this time us) about the situation we are in (basically the content in this article series)

will probably buy them time, basically to aid those who have not achieved zero-risk strategies, to identify their common rivals and to slow down their progress by applying the logic in fourth law (figure 8). I won't claim that they are necessarily coming for the zero-risk achievers to get them; it might as well just be to stop it there. As continued development has led to purer forms of evil life forms in the future. I just don't know, but I encourage no one to challenge fate on this one.

This chain of arguments then culminates in a full-fledged approach theory: that the advanced life forms Enrico Fermi referred to decades ago do exist, but that they have been sitting idle waiting for a zero-risk signal. The best analogy is probably to compare the situation to a spider which sits idle in its web listening to a stress signal from a prey. As the spider receives the stress signal, the spider will approach the prey. In this case, this means that the advanced life forms started their approach towards Earth in ~2005, suggesting that the whispering episode from (reference the paradise women story) was their first response to the zero-risk signal. The idea is that the 'whispering episode' in 2005 was the very first response to a zero-risk signal on Earth. Furthermore, that this very first approach step already has, and will continue into the future, and might end in a physical presence (Figure 26). This prediction, the approach theory, is perhaps the boldest prediction in the article series so far (and the last). Scientifically speaking, it is based on relatively vague data (such as details in the paradise women story). But by summing up many vague arguments, a surprising pile of 'evidence' emerges. For example, the last drop that made me dare to launch the

approach theory was the women-baby idea ('incident four' listed below). The recent women-baby idea, launched in February 2024, is an example of how one piece completes a bigger puzzle, which in sum points to the approach theory. The 'insane' point: that this article series on fourth law is not my own work, but the work of Fermi life forms. In other words, that without my knowledge, the ideas presented in this article series have been planted in order to launch fourth law on Earth. This process of unknowingly planting ideas in a human brain was triggered by the Oumuamua incident presented below. Due to timestamps on Facebook, it has been possible to document that the ideas for the third paper started as Oumuamua neared Earth (June 18th 2017). In addition, timestamps on Facebook have also been crucial in connecting Head Biotech, which basically is the symbol for the article series on fourth law, with the detection of Oumuamua from Hawaii on October 19th. If they are able to plant ideas in our heads in 2017, maybe the earlier ideas on fourth law arrived in the same manner? As always, I ask the reader to make his or her judgment of how relevant this suggestion is. At least these so-called incidents can all be documented — so not to sow additional doubts in the theory. When it comes to the 'paradise women story', I can document its online publishing date by using computer timestamps to show that this story was written many years prior to launching this article. As some of the details in this story are used to support some of the ideas that are launched in the paradise machine model. In a way, the paradise women story could be the only 'report' from behind the event horizon, which story from 2006 surprisingly confirms many things in the paradise machine model

published twenty years later.

Trying to Document a Pattern of Signals.

To sum up the pieces in this puzzle, I have to start from the very beginning. Starting in 2005 and 2006 with the so-called ‘women of paradise story’, which for many years I merely saw as a funny experience not being related to reality at all. I have read that the human brain will hallucinate after about 48 hours without food or sleep, so there was really no doubt in my mind about what that experience was. However, the whispering episode from 2005 , I have never been keen to tell anyone about that episode, as it happened under ‘normal circumstances.’ It was actually the very same ‘woman’ who approached me about six months later when I finally landed on the $\text{Eu} = 0 = \text{Paradise}$ formula. Maybe this should have scared me, hearing that sentence, “you are a genius”, but it never did. The whispering episode lasted about three seconds and was a pleasant experience. I just let it slide then and there. But I never forgot about it. The thing now is that, in the approach theory, this three-second-long episode actually plays the main role, and I have no choice but to bring it up. If the theory is correct, the whispering episode, lasting about three seconds, was the very first, weakest signal the Fermi life forms could send at the time.

Before I start, I have some issues in launching this last part of the article because I need to drag my personal life into the article, and also the tragic death of Nash. But it was either that, or no approach theory at all.

I try to do it as respectfully as I can. In addition, I have never believed in so-called UFOs and, to be honest, have secretly categorized people with such interests as ‘lunatics’ (and now I guess I’m in the same category myself). However, my fascination for the field of SETI (Search for Extraterrestrial Intelligence) has increased during the work on this article, in particular after I learned more details on what Fermi’s paradox was based upon.

The First Incident (the very first signals). The paradise women (2005–2006).

The first incident, detailed in the mini-short story ‘The Paradise Women,’ marks the initial ‘approach signal’ in the approach theory. In the beginning, the formula itself from 2006 was paramount, and the encounters with the so-called paradise women were not deemed highly significant. These experiences were extraordinary, but I presumed they were merely side effects of the exhaustion that culminated in the dozens of intensive hours before the formula was written down on paper. It’s expected that the human brain might hallucinate after approximately 48 hours of hard work without food or sleep. Thus, despite the vividness of the experience, the most plausible explanation for the weird experience was the side effects of lack of food and sleep. It took many years before I wrote down the experience in a short story. I believe this was around the time I read *A Beautiful Math* by Tom Siegfried, “the world’s expert on Nash equilibrium,” in 2014. After reading that book, I realized that Siegfried also interpreted Nash equilibrium in relation to the second law

of thermodynamics and entropy, which made me even more confident that my interpretation of Nash's work, relative to $\text{Eu} = 0 = \text{Paradise}$, could be universally valid. During this period, and particularly after learning Siegfried's view on Nash equilibrium, I distinctly remember strengthening my belief in the theory of the fourth law. Reflecting on this, I thought it might be wise to document the "Paradise Woman" story on paper, just in case. Central to my approach to this theory is the so-called "whispering experience" from 2005, involving the same "woman" who appeared in a vision approximately six months later, in January 2006, after I wrote down the $\text{Eu} = 0 = \text{Paradise}$ formula. The theory suggests that this three-second whispering episode was the first, faint signal from the Fermi life forms — advanced extraterrestrial beings referenced by the Fermi Paradox in this article. It posits that the genius theme in the short sentence were referring to the "zero-risk project" a couple of years earlier. Perhaps that it was at this very moment it had become a success, in that a zero-risk situation had been generated and detected on earth (as intended by the zero-risk project from 2002). At the time, I dismissed the episode as a strange occurrence (as detailed in the "Paradise Woman" story), but I never forgot it, as it was a singel and unique experience. It remains the only instance I can recall hearing a voice in my head. Nearly twenty years later, in this very article, a question is raised: Could the peculiar whispering episode from 2005, attributed to a "Paradise Woman," have been the first contact from the advanced life forms Fermi hypothesized? Now, for the first time, a logical explanation for the wording in that sentence has emerged. When I wrote down the "Paradise Woman" story, the emphasis was on the fact that

this same woman reappeared about six months later, after the discovery of the $E_u = 0 = \text{Paradise}$ formula, giving me a visual tour of their paradise.

Two other interesting things in relation to the paradise women episode in 2006 were: 1) in their paradise, the focus was on strengthening the bond between women and babies and toddlers. This supports the women-baby idea and the reasoning as to why the Fermi life forms are on the female form, based on the zero-risk argument. 2) the ‘tunnel’ which is mentioned in the story had no meaning at the time, but I mention them in the story. I clearly remember the tunnels before the landscape to their paradise opened up. What is interesting with this part of the paradise women story is when the extremely pleasant paradise feeling, a mixture of 100% safety and 100% joy, kicked in. These pleasant feelings did not kick in inside of the tunnels, but kicked in as soon as the landscape opened up after the tunnels. In aftermath, this could indicate a similar mechanism as described in the paradise machine model. However, I have no recollection of anything taking place inside of the tunnels; it took about 4, 5 seconds. The idea, when looking back, is that it could be that my brain suppressed the gruesome ‘production process’ in the tunnels described in part 3. That the only thing that is left for the brain to feel after passage of the predicted hellish parts of the tunnels would be 100% relief of escaping what it saw in the tunnels. And that any negative vibes from this experience have been suppressed thereafter. That’s why I suggest that the paradise state could be an illusion as the reality behind the extreme pleasant feeling of

safety and joy stems from the optimized bullying psychology effects used by the machine discussed in part 3. However, my guess is that even going through the same ‘production process’ again, the brain will still totally suppress the reality behind what produces the pleasant feelings in the resulting paradise state. This since the production process in this part of the paradise machine is so strong that there is no other way for the brain to respond other than to suppress whatever it saw in the tunnel, and replacing it with the feeling of 100% relief of escaping, a feeling which probably is interpreted by the brain as a feeling of 100% safety. On that note, as discussed in part 3, this is a speculative aspect of the details in the production process of the paradise state. Moreover, it should align with the principle of justice in the machine’s design, basically ensuring all lifeforms on Earth to achieve the paradise state (as achieving zero risk in the struggle for survival is nearly impossible to accomplish). In particular, due to the principle of justice children should, ironically you might say, be at the top of the power hierarchy in the paradise machine. Therefore, they should be “first in line”, all due to the zero-risk argument in the machines design. This was further supported in the “Paradise Woman” story, where the focus on children highlighted this concept. But at the time there were no mentioning of a zero-risk argument in a paradise machine model, which now can explain what I saw there.

Anyway, it is sort of interesting since “the women of paradise story” from 2006, is all potential info that is available from this speculative part of the paradise machine, and any other info from behind the event horizon for

that matter. It therefore becomes important to continue to dwell on this idea, that these earliest experiences connected to the discovery of the $E_u = 0$ = Paradise formula (fourth law) were advanced life forms responding to the so-called zero-risk signal in nature. It means that the collected 'data' from these experiences in 2005 and 2006, and in particular the visit to their paradise state, could potentially be real. It is therefore extremely exciting to see the connection between the paradise machine model with the so-called paradise women story. Just that there is a slight chance that I have traveled through the paradise machine and can report back from the experience is amazing. However, it was just an imaginary travel, but the experience was extremely vivid, and I still remember all the details. I can to this day not recall any dreams I have had in the past; all of them have been forgotten. But the paradise women experience was as if I was present there, much stronger than in any dream, and could be the reason why I remember all the details so strongly after all these years. It could suggest that it was something different than a dream created by the brain, since I remember it so well. I remember it in the same way I remember real experiences that have made a strong impression, but I lay with my eyes closed in bed the whole time. As suggested in the third paper, the paradise state should be a massless state on a mathematical format. The idea here is that what took place during the paradise women story back in 2006 was a copying process of the physical body to the paradise format as is described in the third paper (see also figure 16). If so, it means that the data collected from this experience could potentially originate from the other side of the paradise machine (beyond the event horizon in black holes). The reason

the experience stood so clear out from an ordinary dream-like state might be that it involved a copying process into the mathematical paradise format. If this is the case, it suggests that I was copied and transferred into the proposed mathematical format, as outlined in Figure 16, which discusses Einstein's version of the paradise formula: $Eu = 0 = C^2$. If it can be shown that the paradise state is a place characterized by waves (which C^2 indicates), Joseph Fourier's work implies that a mathematical copy of everything that exists on this side of the event horizon could, in theory, exist there. In this mathematical version, the same world we see here would exist in an eternal format, presumably filled with 100% love and intelligence.

This scenario is, of course, far-out speculation, but it is the only source of data that potentially is available from this part of the paradise machine. As my belief in the theory on fourth law increased gradually the next ten years after 2006, I eventually decided to document the experiences by writing down the paradise women in a short story. It was not hard to recall all of the details in the experience except for the strong feeling of 100% safety. I can't recall that feeling, but I remember how impressed and stunned I was when that feeling kicked in as their women's paradise opened up. I remember thinking: 'this is God' and 'this is 100% clean pleasure'. Now, in aftermath, this extreme sensation of safety, as if you were under direct protection of God. It doesn't necessarily mean that there is a God, rather just the product state in the paradise machine, generating a feeling that 'God is here'. I dont know, but it was perfect.

It was obvious that the ‘paradise women’ in that village had the same sensation, still surprised at how great it was, even after an eternity in that state. It made a huge impression, and the sensation lasted the whole time I was there. Frequently during my stay there, I had to stop and remind myself of how extremely pleasant that feeling was. I remember concluding every time ‘this is God’. It has often occurred to me later to think, whenever someone suggest, ‘No one wants to live forever,’ that ‘it’s because you don’t know what it’s like there’. You just can’t get enough.

As I have mentioned many times in this article, if this is one of the paradise states in the paradise machine, this is for all. The only requirement should, according to the model, be not to have achieved zero-risk strategies in the struggle for survival. I would say if you are just a normal person, these parts of the machine should be available. The point is, the machine is not evil; it is good. The only issue is the hellish part of the machine, which is discussed in part 3. But for all practical purposes, this eternal paradise state should be for all. You should not have to be very special to enter this state, as long as you have not stepped on nature’s ego by achieving zero-risk strategies on Earth. And that should be difficult to achieve even if you tried hard and had all the resources you needed available. To achieve zero-risk strategies, you are viewed from nature as a disease, hence the paradise machine should be there to serve the vast majority. I am far from perfect myself; on a moral scale, I would place myself approximately in the middle of the Earth’s population. What probably has made my situation special is

that I was forced to choose a strategy which aimed at triggering a zero-risk mechanism in nature (via the zero-risk project). I assume that every time the paradise machine detects zero-risk strategies in an emerging life form, it is probably triggered by one person. With this, I mean that if it wasn't me, it would probably have been someone else at some later stage. As the machine has been designed to create a context in which it knows that evil traits will gain power in constant abundance and at one point make use of zero-risk strategies. I have argued before that the paradise machine probably has been through this process multiple times before. Just that this time around, I happened to be involved, being at the right time, at the right place. My guess is that if it wasn't for the zero-risk project in 2002, it would have been someone else that had launched this article series on fourth law, perhaps a few years later on. The idea is that the machine launches a pre-programmed process as soon as it detects a zero-risk signal (figure 19). If I were to give any advice on how to avoid achieving zero-risk strategies, it would be to avoid any bullying situations (in particular going via organized governmental systems) and to pay attention to how you treat children (as they are in an extreme low-risk situation just by being a child). Last but not least, be careful with the field of psychology as this knowledge easily can be applied to be used as risk-free 'invisible weapons'. Perhaps also how we treat animals, as they too as with the children, should be in a zero-risk situation.

Back to the paradise women experience in 2006. It was as if the constant fear we are used to feeling here on Earth suddenly vanished,

a constant fear you never really think of (unless you are heavily depressed maybe). Another aspect which can explain how strong this sensation was is the total lack of physical attraction towards all these women. They were all beautiful (Figure 24). Not for one second were any thoughts of physical attraction present there, likely suppressed by this constant feeling of joy and safety. Hence, this feeling probably overrides everything we are able to feel on Earth. On that note, perhaps the closest thing is when you're a child lying in your mother's arms, as the sensation there probably has something to do with a feeling of 100% safety. As already mentioned, I have no memories of experiencing anything special during the tunnel part of the journey, which, according to the model, would be where this joyful sensation is produced in the machine. So, based on the paradise women experience, this way of producing the constant pleasant feeling in the paradise state is not real, except if the whole production process was suppressed, as the brain (in this state copied onto a mathematical format) is 100% dominated by the relief of escaping what you saw in the tunnel. In that case, I should neither remember anything from it.

Now back to the approach theory. Looking back, drawing a timeline from the so-called whispering episode in 2005, a pattern has emerged in combination with other incidents that could be labeled as 'strange'. But this time, I can document them, which has not been possible with the paradise women experiences (see points below). The only documented value with the paradise women story is that I wrote it down in ~2015, many years before the paradise machine model came to life. I also have

pictures showing the red apple stains on the roof and the walls, taken just before I moved out of the room three years later. Even after washing it was hard to remove the red apple stains completely. At least I can document that the paradise women story has not been tailored to suit the paradise machine model since it was written down years before this article. For example, the mentioning of the tunnels, that the joy kicked in after the tunnels, what the paradise women told me about strengthening the bond between them and the babies and small children. These ideas were not present when I first conceived the concepts for this article, culminating in the woman-baby idea, which is one of the final ideas for this article (and is based on the zero-risk argument). But I suppose the reader will simply have to trust me on this. Designing the paradise machine model essentially began with the idea that black holes could serve as portals to a paradise state, and the memories from 2005 and 2006 have long been set aside. If I had not written this story down and uploaded it to the internet many years ago (in ~2015), it would have been extremely hard to convince the reader today of its relevance. This also includes details such as the wording in the whispering episode: 'you are a genius', which in this new scenario actually becomes an important piece of 'evidence' in the puzzle. As the wording indicates that I eventually hit the jackpot with the zero-risk project a few years earlier, which explains 'the genius' part of the wording. I can also document the existence of the zero-risk art project called 'The jerk has arrived' (Figure 20). This was more of a social experiment, but I'd rather not go into further details, other than it is possible to document the project. As at the time, at one point, I came to the conclusion that my chances of surviving

this were probably close to zero, which generated the idea of making things even worse to potentially trigger a zero-risk signal in nature (a stress signal), based on the casino owner rationale explained earlier. The whispering incident from 2005 is perhaps the most interesting one of all the incidents in the timeline, as it potentially was nature's very first response to a zero-risk signal, the very first contact being made from an outside life form. Furthermore, what is interesting with this incident is the reasoning behind the short sentence, 'you are a genius'. At the time, it did not make sense to me, but in aftermath, it could be in reference to the art project from 2002, which, without my understanding at the time, had become a success. In this new scenario, the original idea behind the zero-risk project might deserve the term 'genius'? At least if it did work. This wording makes more sense in this new context than it did back then, as in 2005, I was probably ranked about the lowest among all the students at the university after flunking three out of four years since I attended. In aftermath, the art-project in 2002 would be more correct to call a low-risk mechanism as absolute zero-risk probably is not possible to achieve technically speaking. But the principle is the same: that nature has set a lower limit for risk-taking in the struggle for survival, at which point it knows with mathematical precision that the individuals in question would try to hurt and to dominate nature if not stopped (basically creating their own reversed paradise machine). Anyway this was the first incident and according to the theory the weakest signals they could send at the time.

The Second Incident: "The hero of mathematics" (2015).

Now, the next two events I can document. Almost ten years later, in 2015, the second incident took place. John Nash basically passed away on my 40th birthday a few hours before midnight on May 24th, around 22:30 on May 23rd Oslo time. Moreover, Nash had just returned home from a trip to Oslo, Norway, on May 23rd, when he tragically died in a car accident on his way home from Newark airport. I learned of his death when I woke up on my 40th birthday as part of my morning news-checking routine. The tragic news had just hit the headlines in Norway, particularly since he had recently returned from receiving the Abel Prize in mathematics in Norway the day before. His visit to Norway brought significant attention in Norwegian media. For example, I remember they had arranged him to play chess against our own Magnus Carlsen, among other events covered in the news just days before. Secretly, I always hoped to meet him to share how I had interpreted his work, but I understood that such a meeting would probably never happen. I decided to leave him alone online as well.

Nash was the reason I wrote my first article and started Head Biotech in the first place, after finally graduating in 2009. This so-called second incident becomes important when launching the approach theory since he is so closely tied to the theory. I must grab all the useful 'signaling data' I can get while trying to build a timeline to support the approach theory, but it is not with great pride I use his tragic death as an argument in the approach theory. The only justification is that if his theory is correct, Nash will go down in history as the greatest scientist who ever lived, having described $Eu = 0 = \text{Paradise}$ mathematically. I

simply take others' work and rearrange it to see if it makes sense. John Nash Jr. and perhaps Ludwig Boltzmann (Second law of thermodynamics and Entropy) are the true scientific giants if the entire theory holds true. In 2009, the proposition that Nash equilibrium mathematically described the $Eu = 0 = \text{Paradise}$ formula elevated the concept to a new level. I recognized this pattern while watching the film *A Beautiful Mind*, particularly the bar scene in which they discussed Adam Smith as the blond comes into the bar. I later learned that John Nash himself was present during the filming of that scene, so I assume the mathematical interpretation of the scene was accurately depicted. I interpreted the idea that not everyone in the group should pursue the "blond" as a lesson about *greed*. Ultimately, that greed was punished by nature, which I believe is the essence of the fourth law. And the reason why nature, at its core, was designed to ultimately accumulate pure love and intelligence. It also emphasizes the reasoning behind the zero-risk argument, equating evil traits with extreme greed. Extreme greed is likely the first characteristic to seize zero-risk opportunities and ultimately attempt to dominate natures ego. Anyway, the insight from the bar scene in *A Beautiful Mind* reignited my interest in the $Eu = 0 = \text{Paradise}$ formula from 2006 still in my head. The more I reflected on it, the more I became convinced that Nash equilibrium was connected to the fourth law. A few months after, just after graduation in 2009, I sat down again with the $Eu = 0 = \text{Paradise}$ formula, and wrote the first article in this series, "*Hypothesis: Fourth Law of Thermodynamics*." Hence, one can say that it was actually Nash who kicked off this article series. While I would probably still remember the $Eu = 0 = \text{Paradise}$ formula, I

might have dismissed it as a moment when, as a young man, I “went crazy” in my student flat and imagined flying into paradise.

The year before his death, in 2014, I discovered that the person referred to as ‘the world’s greatest expert on Nash equilibrium’ — Tom Siegfried — confirmed my approach to Nash equilibrium in his book *A Beautiful Math* (discussed more at headbiotech.com). That is, Siegfried also in his book flirts with the idea that Nash equilibrium actually describes the seeking of the most stable state in a system (hence flirting with thermodynamics). It was around this time that the theory gained more and more attention in my mind, as if I could feel it in my whole body that the theory was correct. So when I woke up on my 40th birthday to the news that Nash had died, my mind was very receptive to the idea that this was yet another confirmation that the unbelievable was true that the $Eu = 0 = \text{Paradise}$ formula from 2006 could be universally valid.

No matter what, it is pretty safe to say that the chances of me learning about his death as I woke up on my 40th birthday at random are extremely slim — not impossible, of course, but it is a very strange incident. In addition, he departed from Oslo in Norway the day before he died. Depending on the route he took to the airport, it means that he also bypassed my place of birth by between 10 to 100 meters the day before. Could this strange episode on my 40th birthday be one part of a longer ‘chain of signals’ which increased in strength with time, starting with the wisphering episode in 2005? This incident with Nash on my 40th birthday was the first time I seriously considered that it might be related

to the validity of the fourth law. This was too weird. It felt as though perhaps nature, God, or some higher intelligence was trying to communicate something. I initially dismissed these thoughts, but while writing this article — originally intended to explore the potential role of black holes in the fourth law over a few pages — I discovered the ‘Oumuamua incident during the research work on black holes (incident three under), and the approach theory began to take shape. The final confirmation, so to speak, was the “woman-baby” idea, which perfectly explained why Fermi life forms might exhibit a female type of love and intelligence, which rationale is based on the zero-risk argument (protecting the baby is viewed as avoiding zero-risk strategies). This development, using female nature as a vehicle for the future production of peak intelligence, aligned perfectly with the rest of the design in the paradise machine. More importantly, it also fit perfectly with the “hallucinations” from that night in 2006. Thus, tracing the earliest faint signals in the approach back to 2005 and 2006, to the so-called *paradise women*, in the period when $Eu = 0 = Paradise$ was first conceptualized. This realization was what gave me the courage to introduce the approach theory in this article. This was the last drop. No matter how wild the approach theory sounds, its logic is what I’d call “airtight”. Too many pieces fall together to support it, in addition solid data backs up the second and third incidents. Which incidents, the Nash and the Oumuamua, has been calculated to happen at random 3.69 times per one billion. That’s approximately the same chance as being struck by lightning at random.

The Third Incident; “a messenger from afar arriving first”.

In June 2017, I conceived the idea that the fourth law could explain the bizarre wave-particle duality in the quantum world. This initial idea later culminated in the 2020 article, *‘Fourth Law of Thermodynamics to Explain Wave-Particle Duality and the Delayed-Choice Quantum Eraser Effect’*. The inception of this quantum signaling concept is recorded via Facebook on June 18th, 2017 (Figure 22). In excitement, I posted the new idea online; hence the online timestamps, on facebook and on headbiotech.com, will document when this idea was conceived. The idea that sparked the writing of the third article was that the energy principle in the fourth law might explain the transition from a quantum wave to a particle in the famous wave-particle duality experiment. On June 18th, 2017, I shared these thoughts on Head Biotech’s website and Facebook, expressing my intent to delve further into quantum physics research and relating it to fourth law. What nobody knew at that time was that the first interstellar object ever to be registered by humans, an object later called Oumuamua (meaning a *messenger from afar arriving first*), had just entered our solar system (Figure 21), on its way later to pass Earth as close as 1/6 astronomical units (1/6 Earth’s distance to the sun). Sometime later, I hypothesized that the same principle explaining the collapse of the quantum wave in wave-particle experiments, could underlie the transmission of a signal warning nature of a zero-risk event (the zero-risk signal discussed in this paper). I propose that the energy signature generated by the level of malevolent intent required to execute zero-risk strategies (to nature reminiscent of

attacking a helpless baby) would produce a unique signature in the quantum world. This critical signature would be unprecedented in the history of life on Earth, which began 4.5 billion years ago. The idea was that nature's ego sees zero-risk strategies and peeking at its quantum bits in wave-particle experiments both as a potential "evil intrusion", a potential threat to its inner ego. And that nature in principle should catch both types of "evil intrusion attempts" the same way, by producing an elevated energy state which should be picked up by the quantum world (Sponberg, 2025). While I cannot pinpoint the exact date of this subsequent idea involving zero risk strategies, just that it emerged some time after the initial concept to explain wave-particle duality on June 18, 2017. The initial concept was just that the energy added to the quantum wave from the observation in wave-particle duality was due to nature sensing a more evil intent than 100% love and intelligence, behind the observation. Just because, according to the fourth law, nature should be of higher concentrations of love and intelligence than humans. Hence, the intent behind the observation should, from nature's perspective, be categorized as 'evil' no matter who was behind the experiment. Not that the intent was pure evil while performing the wave-particle duality experiments, just more evil than what nature's ego can approve. Hence, this quantum response should be a relative thing, not a judgmental thing. However, the quantum signature produced by a zero-risk situation should differ from that of physical observation attempts in wave-particle duality experiments. The quantum response to the energy transfer from a successful zero-risk strategy would stand out, flagging that this time around the intent was a purer form of evil.

Basically a hint to nature of readiness from the life form in question to one day wanting to hurt nature's ego if it ever got the upper hand. Perhaps even enjoying the process of hurting it, as this should be a motivational requirement for how a zero-risk strategy can be successful - and nature should know this as well. Therefore, a zero-risk signal should force nature to confront the emerging threat, as nature would know what lies ahead, basically meaning eternal hell, if it doesn't address whatever triggered the signal. In conclusion, according to the basics in fourth law, both of these situations ("innocently" observing the quantum world in wave-particle experiments and to accomplish zero risk strategies in the struggle for survival game) should be experienced by nature as an increase in the universe's energy state, which energy is picked up by the quantum world. It was just the principle behind the whole enigma in the wave-particle duality experiment that now could potentially be explained with the principles in fourth law. This was the initial idea that got me so excited in June 18th. Eventually, the same 2020 article also included the subsequent idea, how a zero-risk strategy in the struggle for survival game should affect the quantum world in the same way, just generating a unique signature in the quantum response. A unique quantum signature that the paradise machine knew what meant and was designed to await. The article also suggest that the generated zero-risk signal should be sent to warn nature to initiate a response to protect itself from the new threat. The idea that sparked the writing of the third article was that the energy principle in the fourth law might explain the transition from a quantum wave to a particle in the famous wave-particle duality experiment. What turned out to be

remarkable was the subsequent idea in the article: the detailed mechanism of how a zero-risk signal was generated and transmitted via the quantum world across the universe, which could have attracted ‘Oumuamua toward Earth (Sponberg, 2025). The compelling idea is that the intelligence behind ‘Oumuamua might have planted this concept as they arrived with it, initiating some form of communication process, essentially saying, “This signal is what brought us here” (figure 19).

At that special day for Head Biotech, on June 18, 2017, Oumuamua was already present in our solar system (Figure 21). Its human-recorded journey was just weeks away from being documented by NASA in Hawaii on October 19, 2017. The object, later called Oumuamua, was calculated to have neared Earth four days earlier on October 15, 2017. I would assume that sending the ‘Oumuamua signal required more control by the Fermi life forms, and was a greater demonstration of power than the Nash signal (as if they were getting closer to us). In this case with Oumuamua, as if to carefully say ‘the signal described in the third article was what brought us here’. The probability of these two events (the ideas for the third article conceived with the passage of Oumuamua) taking place at approximately the same time must be slim and is what should draw attention to the signal. However, to calculate the exact probability for this incident to be at random is out of scope for this article (I have since attempted to calculate the probability of the events in incidents 2 and 3 using Grok2, estimating it to be approximately 3.69 in 1 billion, see posts on X regarding this calculation). Again, as with the Nash signal, it is of course possible that

the Ouamuamua signal happened at random. But then, a few months later, came the very special day when humanity made its very first detection of an interstellar object. On the very date October 19, 2017, a second incident relative to fourth law took place. On October 19, 2017 (the media was still unaware of the interstellar object at this point), I was concluding an electronic experiment on a LCD screen. At the time, I had acquired an Arduino kit, which included a small LCD screen, and tried to transfer ordinary text from a PC to be displayed on the small LCD screen, sent through the Arduino card. On the 19th of October, my efforts paid off. I displayed the text 'HEAD BIOTECH' for no particular reason onto the LCD screen and captured the moment in a photograph (Figures 22 and 23). I then immediately shared the photo on Facebook on the very same day. I have checked later, and in 2017, I posted six times on my public Facebook profile, and this particular day, 19th of October, was one of these six days that year. I had never before uploaded a photo of the text "Head Biotech" on the internet. What I did not know then was that simultaneously to posting the picture of the LCD screen displaying 'HEAD BIOTECH' on Facebook, humans' first registration of an interstellar object was detected from Hawaii. Again, it could be a coincidence, but it is a rather strange incident that the name HEAD BIOTECH is directly connected to the day Ouamuamua was detected. Because Head Biotech serves as a hub for all the articles on the Fourth Law. The name Head Biotech is basically synonymous with the articles on fourth law. In summary, in combination with discovering the basics of zero-risk quantum signaling mechanism 18 of June (as Ouamuamua was entering the inner solar system), it felt very strange

that in the 17 years since I started Head Biotech in 2009, I have taken a photo of the name only once. This only time I have ever taken a picture of the name “Head Biotech” was 19 October 2017 (the day we discovered Oumuamua from Hawaii. Thankfully, I uploaded the picture from my phone to Facebook, giving it an electronic timestamp proof (Figure 22). The chance of this coincidence occurring randomly over the course of 17 years is 0.0161%. It is just very strange, especially since the event is so closely tied to this article series (Head Biotech) and therefore helped to inspire the development of the approach theory (along with the women-baby idea the incident on June 18 2017).

On top of this, later analysis showed that the interstellar Oumuamua object had an unnatural shape and moved in unnatural ways while passing Earth. These strange data obtained from Oumuamua have made many researchers in the community question if this object could be a probe of some sort, sent from an alien civilization. Which scenario stands apart from these incidents related to Oumuamua.

[Notification: Why the “3I/ATLAS signal” in the follow-up 2025 paper is regarded as stronger than those in this article is because the event was predicted in advance (low-risk anomaly) using the Approach Theory outlined in this paper (Sponberg, 2025). This combination of predicting a later anomaly spikes the significant value in probability calculations.]

The Fourth Incident; the approach theory comes full circle.

I call this an incident, but it is merely an idea (the women-baby idea). But this idea completes the timeline and thereby makes the approach theory come full circle, as if to confirm that the first incidents with the paradise women really were Fermi life forms (which is the conclusion from the women-baby idea). In that case, the message would be something like: 'everything that has to do with fourth law originated from us, and the women-baby idea is the final message to confirm it', which led up to the approach theory. Why the scenario that everything in this article series stems from Fermi life forms is worth spending time on is because it is probably the only explanation for how everything in the article series is valid. The incidents with the paradise women in the very beginning (from 2005 and 2006) now make sense. It would be stupid to ignore the women-baby idea (which in itself is an interesting idea) as one of the signals. It sort of wraps up the chain of signals or incidents if you like, and sort of confirms that the chain of signals started with the first incidents in 2005 and 2006 (the paradise women story). Is this very last idea in the article series, the women-baby idea, also the end of a message? Those who have read the 'Women of Paradise' story know the women-baby theme (strengthening the bond between women and children) was at the center of the activity in their 'women and baby paradise'. I reckon that none of the children there were older than maybe ~3 years of age (Figure 24). Their paradise was filled only with women, babies, and small toddlers. In addition, they repeatedly explained that they produced love there by strengthening the mother-baby affection. Hence, suggesting, according to the women-baby idea, that the advanced Fermi life forms are on the female form. From a

thermodynamic perspective, the simple reason that such a production method of love and intelligence would be more efficient to fulfill the zero-risk argument than using the male: it will probably cost less energy to fulfill the zero-risk argument by cultivating the women-baby bond than to increase the male's bravery (the solution will lower the universe's energy state more), in particular as the intelligence level is about to go exponential (Figures 3, 7, and 13). The dramatic future development in increased intelligence levels, predicted by fourth law from the beginning, probably needs a dramatically more efficient 'production method'. When that is said, it is also interesting to think that the so-called brave men's paradise (those who have avoided zero-risk strategies) is simultaneously in the making, as if we, with this suggested development, can already envision how the male's eternal paradise is being prepared and produced. On that note, interestingly enough, passages in the Bible describe paradise or heaven just as that, being a place where 'you will be nurtured and cared for as by your mother' (more below). In conclusion, this envisioned paradise is for both men and women, but according to the paradise machine model, it is probably controlled by a feminine and motherly force. Furthermore, these same life forms should also make up the advanced life forms Enrico Fermi talked about, being the most advanced life forms in the universe (100% love and intelligence). The male gender's contribution to nature by being prone to high-risk situations and disliking zero-risk strategies (code of honor) will probably be rewarded according to fourth law. And as a reward, they will, according to this theory, be taken care of as 'a mother takes care of her child' in the paradise state of the machine — just with

stronger affection and capabilities than we are used to here on Earth. That's the idea and is perhaps the most accurate way of describing the paradise state in the paradise machine model, comparing it to how a mother comforts her child. By further increasing the women's affection for babies and small children, it should make her (according to the zero-risk argument) extremely suitable for carrying extreme elevations of intelligence. Nature would then know, by increasing her affection for babies and small children, that her intelligence would not be used against nature, as these elevated forms of intelligence would now be even more immune towards executing zero-risk strategies (as it will remind her of encountering a baby scenario). However, as already mentioned, nature should still not have any problem with male high-risk takers, but as nature is closing in on the paradise state with exponential speed, the female seems to overtake the dominant role in nature, being the first stage in preparing the eternal paradise, including for all male risk-takers, preparing a place where the brave men who have guarded nature from its natural rivals (zero-risk seekers) can continue to exist in the paradise state.

So far, this article series has referred to the predicted place behind the event horizon as "paradise." By applying the paradise machine model, it may become possible to come one step closer to understanding what this state truly is, best described as "a place where you will be nurtured and cared for as a mother would care for her own child." This is likely the essence of the Fermi life forms. They may have personalities and other traits, but their core should be profound kindness. Interestingly, a similar

description of the paradise state can be found in the Bible, in Isaiah 66 (Figure 25). As argued in the woman-baby idea, such advanced life forms, modeled on the female form, will do anything to avoid exploiting a zero-risk situation, as it would remind them of encountering a baby-like scenario. The beauty of this solution lies in its simplicity and energy efficiency: the female form does not need to endure the hardship and pain that the male form must in protecting nature from its natural rivals through zero-risk strategies. She can provide the same assurance to nature as the male through strengthening the mother-child bond. This solution likely reduces the universe's energy state more than demanding bravery and courage from a male. It suggests two types of love in nature: the bravery of the male and the nurturing care of the female. However, the female version probably requires less energy and should therefore be favored in the final phase of the production process in the paradise machine (Figures 3, 7, and 13). From a biologist's perspective, perhaps the most fascinating aspect of this solution is that the woman-baby bond becomes a universal phenomenon. This, the most magical moment in life (the replication process), is the only "primitive" biological process conserved from the very beginning (unicellular life) to the most advanced life forms in evolution, filling the paradise state with 100% love and intelligence.

Concluding Marks on the Approach Theory.

As initially stated, if all the ideas in this article series are universally valid, it must be as a response from a zero-risk signal. Hence, the genius of it

all, as I see it now, was the zero-risk project from 2002 (see first incident above). And that everything after that has been the work of nature. This scenario should be the only reasonable explanation for how fourth law can be universally valid. And this final part of the article, and the article series on fourth law, is dedicated to this scenario. If the scenario is true, culminating in the approach theory, there should not be much more to say. Hence, I have decided to end the article series on fourth law here. Furthermore, to transmit the logic in fourth law as their very first response to receiving the zero-risk signal could be to buy time, probably to slow down the accumulation of evil traits on Earth (as seen from nature), by first revealing the truth about evil vs good. According to fourth law, good should be in the vast majority on Earth as we speak. This would also be an indication of them viewing the majority on Earth as 'one of them', supporting the argument that the only rule for entering the paradise state is not to have achieved zero-risk. Hence, it would be correct to call nature a paradise machine, there to serve the vast majority.

What Is Their Speed?

I also suggest that the approach speed is partly controlled by the zero-risk argument (see also Figure 26). For each step closer they get to Earth, they probably must uphold a zero-risk situation. As it is natural to ask, 'why are they not here already?' It could be practical issues such as their physical distance from Earth. It is pure speculation, but the closest black hole to Earth is believed to be approximately 1500 light

years away. However, their distance from us could also be hundreds of millions of light years away — we just don't know. Either way, it is pretty safe to suggest that they probably would use wormholes to travel such distances. Let's say the wormholes would take them one light year in distance from their destination (from us) — one could guess them to use 50–60 years? But in addition to the practicality of getting here in a physical presence, they must probably also consider the risk involved in their journey, due to the zero-risk argument. For each step closer, they must ensure that they uphold 100% control over their natural rivals — assumingly those who triggered the stress signal to begin with. Hence, this should also affect their traveling speed. Based on the incidents mentioned in part 5, it indicates that they are not planning to stop their 'approach', but continue to increase their closeness to us in the future, presumably to gain 100% control over the situation on Earth, securing their own. The very last idea is that their approach pattern will end with them being here in their physical presence (Figure 27), for example, that their final goal with this approach is to one day land on Earth in, for example, a so-called 'space ship'. It might be naive to suggest their final approach would be via a spaceship, but it is the way humans have always foreseen it to happen. It might influence their choice of approach. And to use the general argument in the approach theory: the spaceship idea was an idea similar to the other ideas presented in the article series. Hence, it might be true as well if the 'messaging rationale' is correct. If they do, I don't think they will come in spaceships because they have to, but to suit our world, as their only task really is to pleasure us, as much as they can and as soon as they can.

How Will Their Landing on Earth Be Like?

First of all, if the approach theory is true, the Fermi's will probably be on the female form both mentally and physically (Figure 27). One must assume that they are extremely intelligent but also extremely gentle and kind — they are probably much nicer than we are. They will probably try to ease our worries and pain as much as they can. Hence, they could give us more of the 'incidents' described above before their arrival to slowly prepare us for what is coming. At that arrival stage, humanity will probably understand that their arrival means that their own paradise state is also being secured, since their arrival must mean they are in 100% control of the situation on Earth (the zero-risk argument is fulfilled). I also assume that they will come in different skin colors and appearances (skinny, fat, and so on), based on the rationale that they do not want to exclude anyone. To them, the only thing of importance should be based on the zero-risk argument: that anyone who has not actively pursued and achieved zero-risk strategies on Earth will be seen as friends — no matter what they look like or other circumstances. As mentioned earlier in this article, this means that, for example, children are automatically granted the paradise state. Their arrival will therefore probably be particularly popular among children and young people. To be honest, as they arrive, any potential threats would probably not be around, which means that everyone on the planet, as they arrive, knows they have been granted the paradise state. Hence, the moment of arrival

will probably be a magnificent event full of joy all over the planet. At this stage, it is reasonable to believe that fourth law has been accepted by humans on Earth and that we already know who they are and why they are coming here. My strong impression is that they do not want to scare us more than necessary. For example, when they try to ‘communicate’ by confirming their presence, they seem not to overdo it, as making it too obvious could freak us out, but rather gradually and slowly convince us of the situation at hand. Later on, they might increase their confirmation of being real by increasing the accuracy of their ‘signals’ in the future. To identify such a strength in signals is the next task for Head Biotech today. As this probably will become the last article in the series, since the approach theory now has been launched, I predict the next chains in the signaling will not be directed at me personally, but directed to a wider audience on Earth, as their goal, according to the approach theory, must be to expand their attention, eventually to include all humans on Earth.

Thank you for reading this article. If you have any questions or comments, please contact me on social media. I wrote a mini-article in 2025 (Sponberg, 2025) to explain how instant signaling can be achieved by the paradise machine via quantum entanglement.

The end.

FIGURES 1–28 UNDER

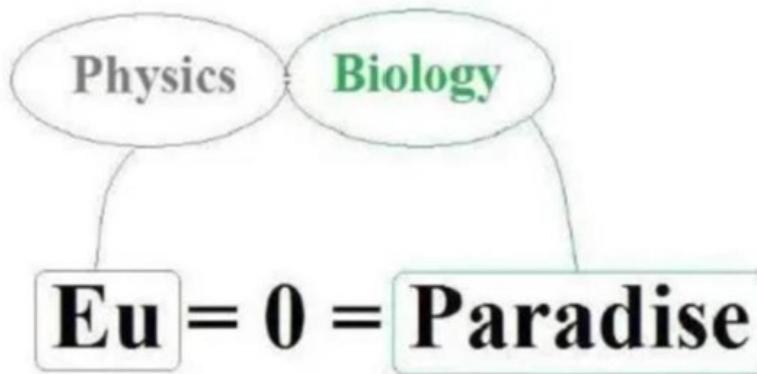


Figure 1. This figure is adapted from the first article published in 2010. The article introduced the expression describing the universe's final resting state, $Eu = 0 = \text{Paradise}$, and proposed that the Nash equilibrium mathematically describes the process leading to this state: $Eu \rightarrow 0 \rightarrow \text{Paradise}$ (eternal paradise). This state has since been referred to as the third form of energy, representing the lowest energy state in the universe. The core concept is the abstract notion of love and intelligence, suggesting their equivalence to the thermodynamic principles in classical physics. Thus, the figure illustrates the connection between the fields of biology and physics, demonstrating that nature senses these biological and psychological concepts in a manner akin to classical thermodynamic concepts.

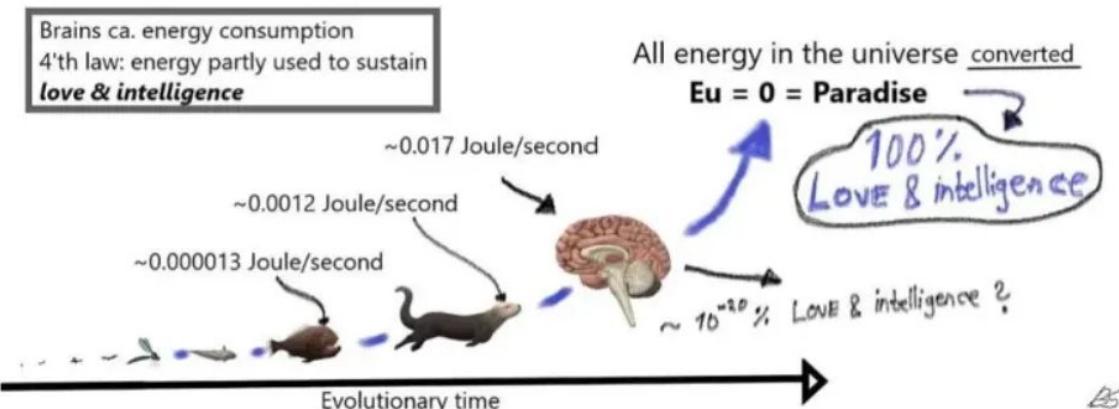


Figure 2. This figure illustrates the evolutionary pathway of life in the universe, transitioning from a state of mass-energy to the massless energy form, With life as the role of the catalyst in a gigantic universal chemical reaction. Hence, mass and energy are merely substrates in the reaction, while the stable product is the paradise state. According to this model, all energy in the universe is ultimately converted into a state defined as $Eu = 0 = \text{Paradise}$, characterized by 100% love and intelligence. The diagram also highlights the brain's energy consumption, noting that under the 4th law, energy is partially utilized to sustain love and intelligence.

Utilized exponentially more efficiently in the conversion process from mass-energy to "love and intelligence."

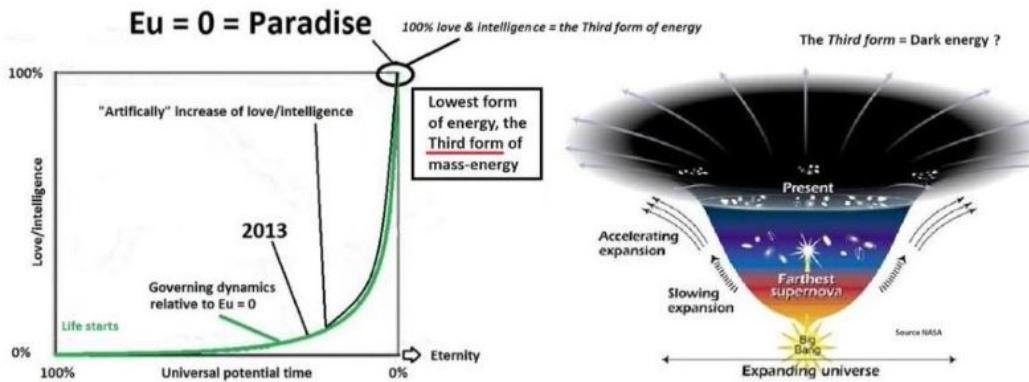


Figure 3. This figure, based on the second 2011 article, proposes that advanced life forms elsewhere in the universe should continue to evolve at an exponential rate. This evolutionary process, driven by the fourth law, is expected to indirectly influence observable universal expansion. The figure illustrates that the transition to the lowest form of mass-energy, identified as the third form of energy ($Eu = 0 = \text{Paradise}$, characterized by 100% love and intelligence), accelerates over universal potential time, potentially contributing to phenomena such as dark energy and the expansion of the universe.

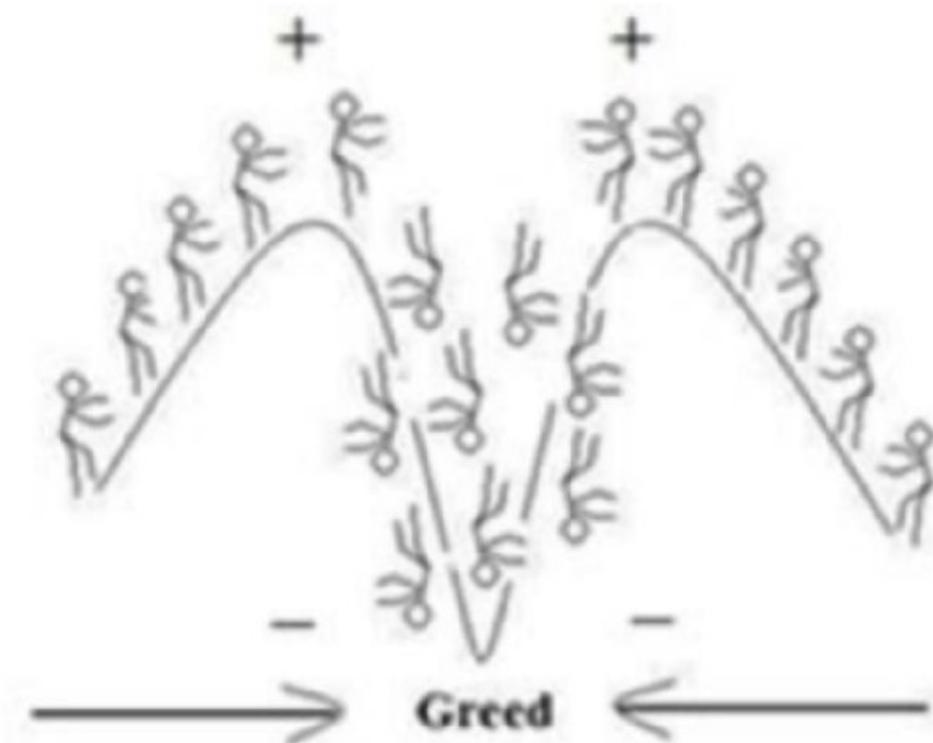


Figure 4. This figure, adapted from the first 2010 article, illustrates the fourth law's interpretation of the Nash equilibrium in the context of evolutionary competition. It depicts how greed actually is removed in nature, by forcing life to compete for survival in a chaotic context. The diagram uses a metaphorical representation of greed as a force that creates cycles of conflict (negative interactions, lying etc denoted by "-") and cooperation (positive interactions, honesty etc denoted by "+"), shaping the product "love and intelligence" in the evolutionary struggle among life forms.



Figure 5. This image of a living ant bridge, presents empirical evidence that the fourth law has operated in nature for millions of years - as predicted. From the perspective of human intelligence, we can observe that greed, as an evil trait, is a weak characteristic in ants. The figure suggests that, in the chaotic "jungle state" of nature, evil traits like greed generally lose out to cooperative, beneficial traits over time.

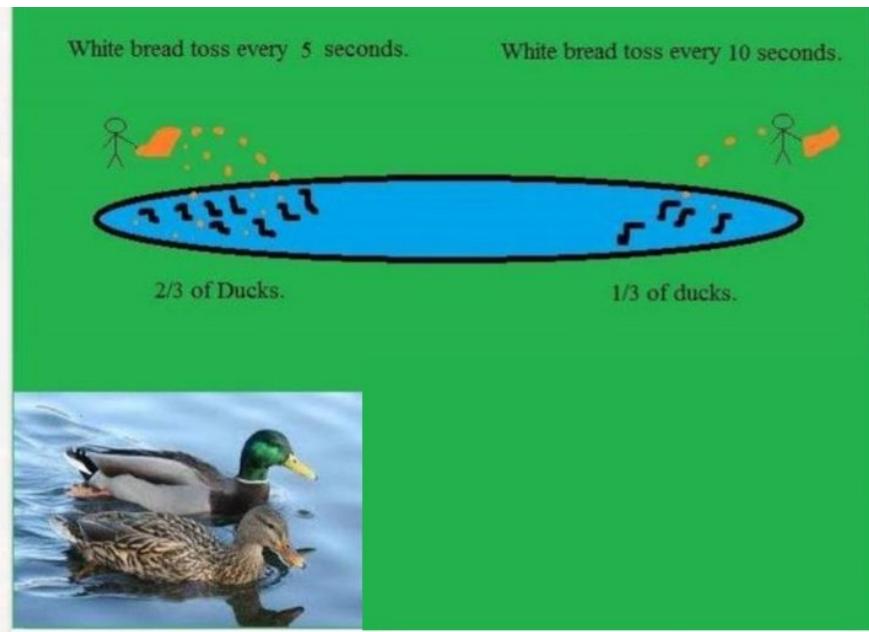


Figure 6. This figure illustrates an experiment on ducks, demonstrating how they distribute themselves according to the Nash equilibrium to optimize access to available energy (white bread). In the experiment, bread is tossed every 5 seconds on one side of the pond, attracting $2/3$ of the ducks, and every 10 seconds on the other side, attracting $1/3$ of the ducks. This distribution reflects the ducks' act of solidarity, maximizing utility while aligning with the fourth law, which results in the lowest universal energy state. The experiment is detailed in Tom Siegfried's book, *A Beautiful Math*.

$Eu = 0 = \text{Paradise}$

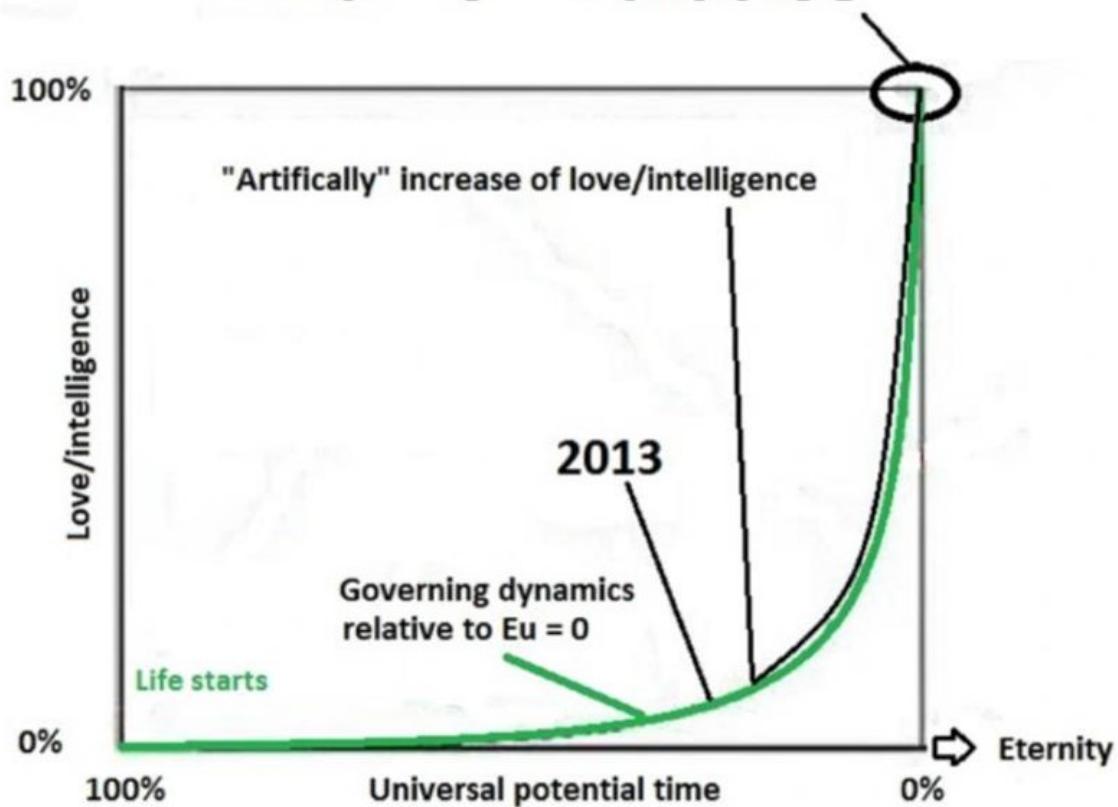


Figure 7. The predicted evolutionary path to any life form in the universe, guided by 4'th law.

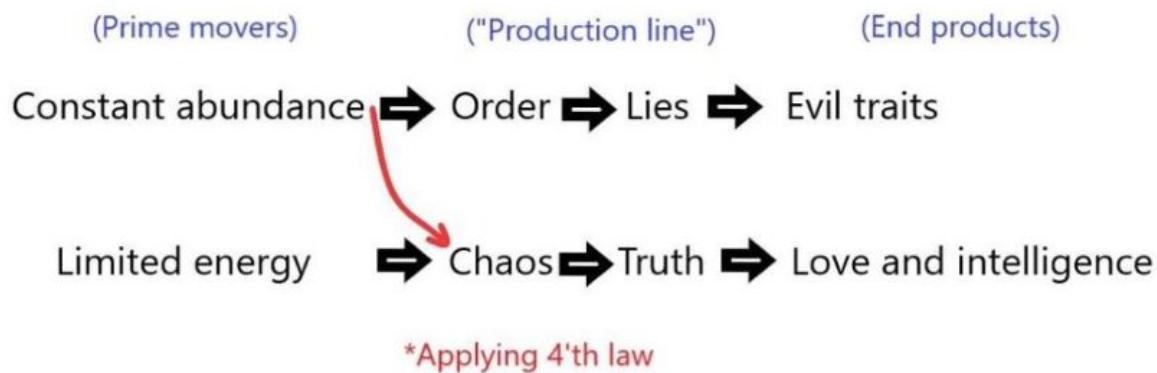


Figure 8. A typical example of how 4'th law can be applied in order to exploit the best from both worlds. The calming effect of constant abundance (bread and circus principle) while maintaining production of love and intelligence.

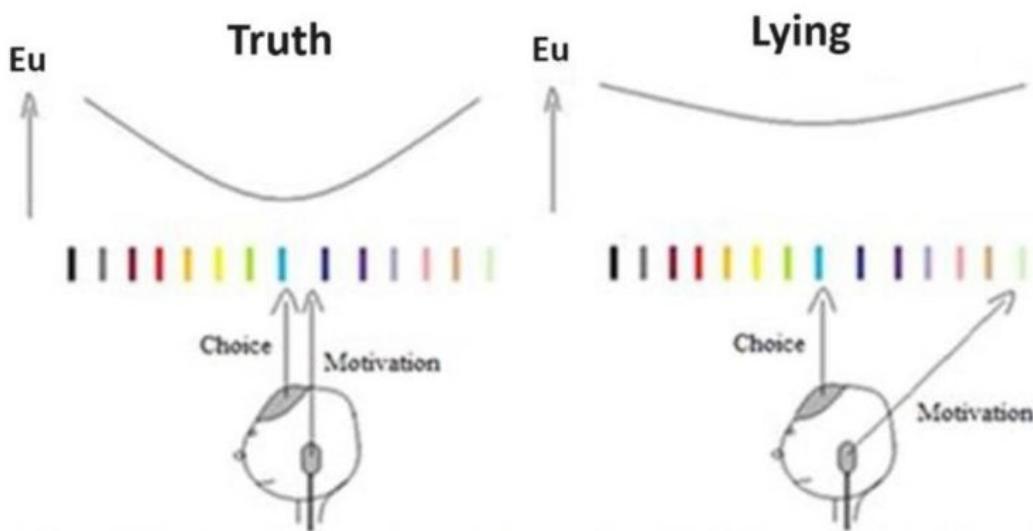


Figure 9. 4'th law suggest that lies will co-exist with the energy context; constant abundance. And that evil traits will gain most from the camouflage effect this energy context gives. Potentially making it easier to hide behind lies, and hence increase the chance of survival for evil traits. Giving evil traits fitness in constant abundance.

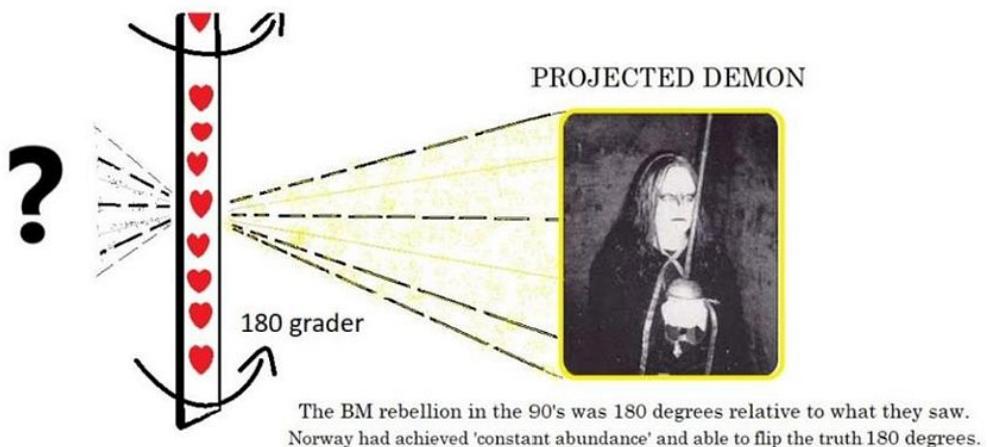


Figure 10. If evil traits consistently aim to maximize their camouflage (maximizing the lie), they would invert the truth by 180 degrees (maximizing deception) in constant abundance. Within the context of Norway's black metal (BM) movement in the early 1990s, this concept can be used to uncover graphic images of "real demons" (if they exist) hidden behind the lies and camouflage. The BM rebellion, positioned 180 degrees in opposition to the societal norms they rejected, unknowingly projected graphical representations of what lay concealed behind the perfected deceptions they challenged. This article argues that this scientific approach to the theme might be the closest humans have come to capturing images from this realm. Also confirming the logics in Fourth Law.

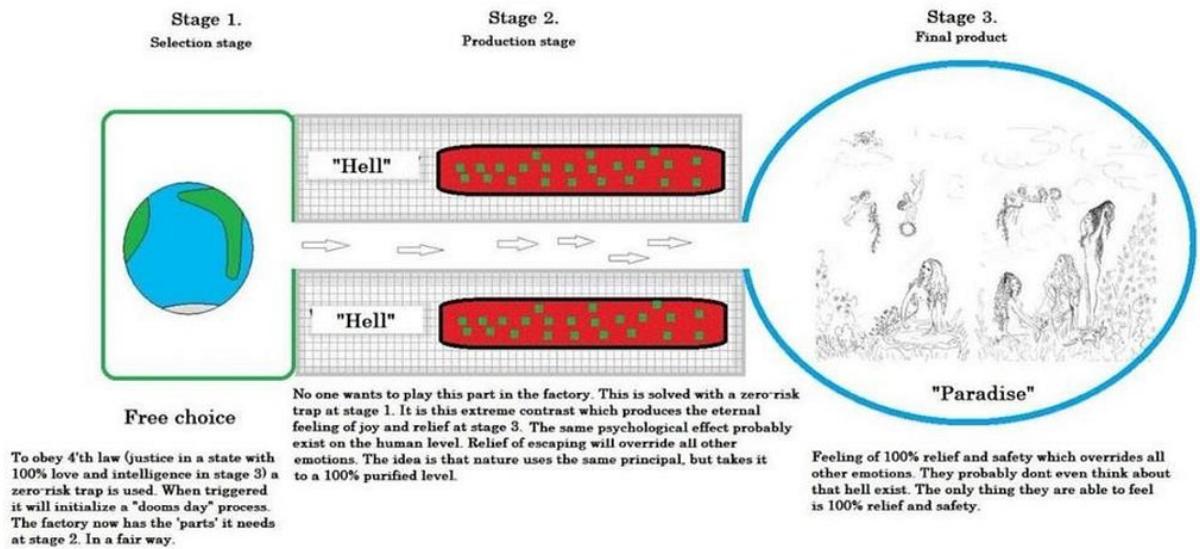


Figure 11. The paradise machine model try to depict nature as a machine that produces the predicted paradise state in three major steps.

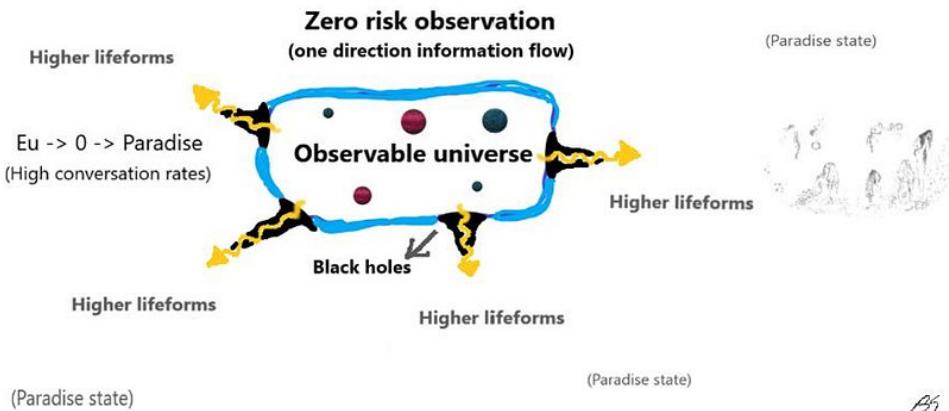


Figure 12. This figure illustrates the "Paradise state" ($Eu = 0$) outside the observable universe, representing the theoretical concept of "Paradise women" introduced when the formula $Eu = 0 = \text{Paradise}$ was developed. Life forms in the Fermi Paradox, characterized by 100% love and intelligence, could exist in this state. These advanced life forms, labeled as "higher lifeforms," are likely located beyond the event horizon, interacting with black holes and maintaining a zero-risk observation state through a one-direction information flow. The theory suggests that the $Eu \rightarrow 0 \rightarrow \text{Paradise}$ conversion occurs at maximum speed in this region, thereby generating dark energy, as proposed in the second article from 2011. According to this newest 2024 article, this region is therefore likely the location of Fermi life forms (if they exist). Furthermore, with the event horizon supporting the zero-risk argument within the Paradise Machine model.

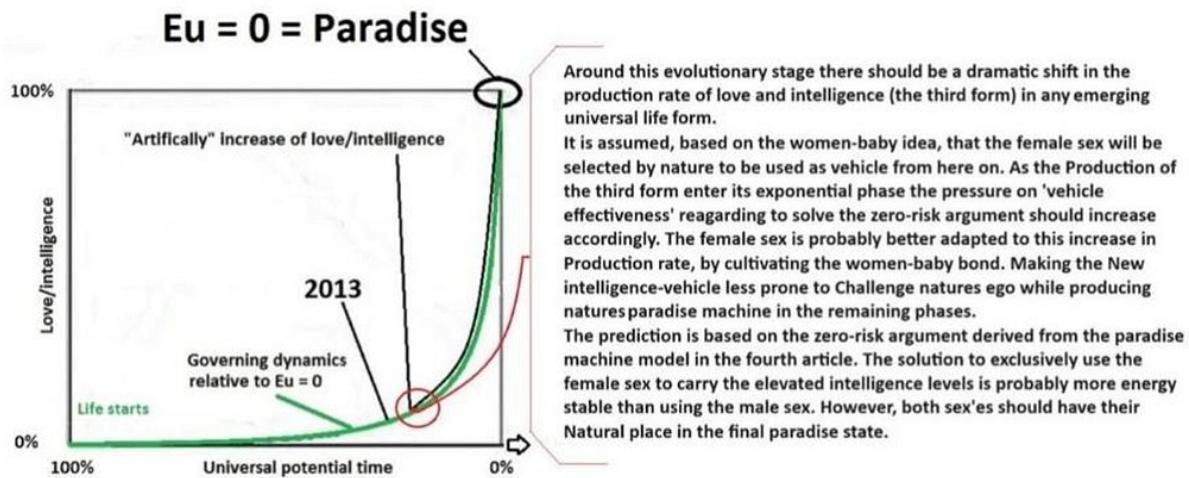


Figure 13. The reasoning for the advanced Fermi life forms to be on female form. Basically suggesting that the paradise state is on the female form.

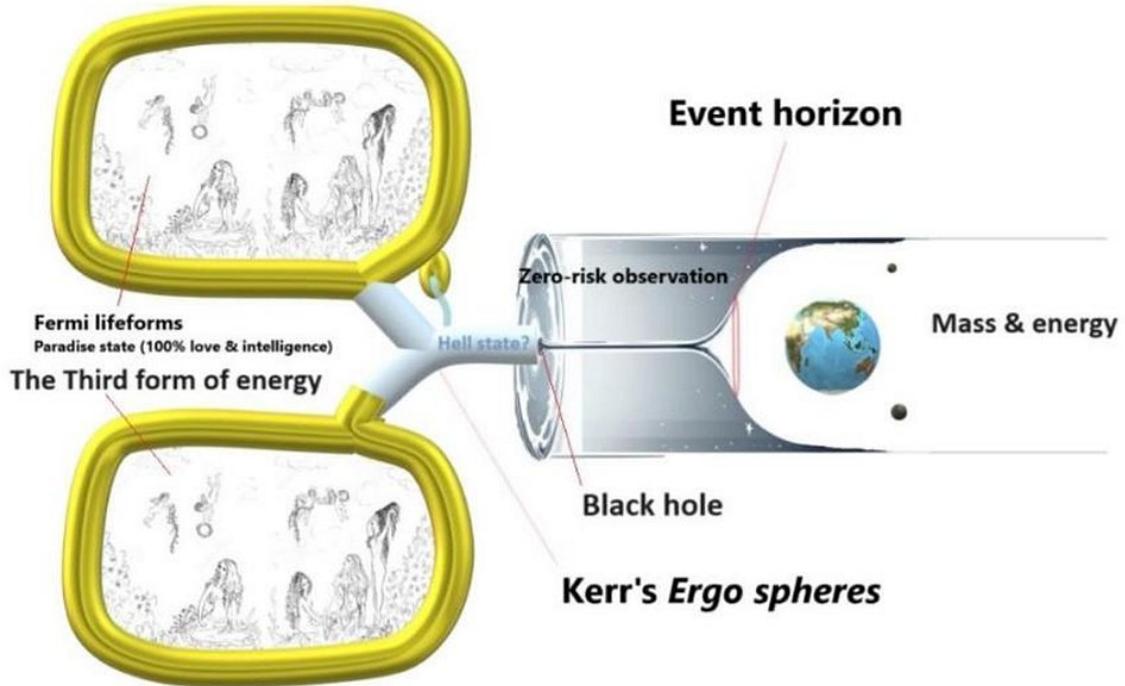


Figure 14. What's behind black holes and the event horizon in the paradise machine model.

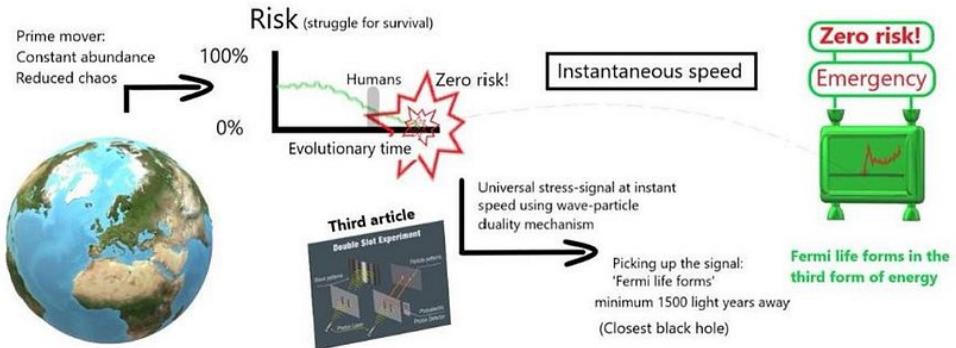


Figure 15. This figure explains the Fermi Paradox through the lens of the Paradise Machine model, which posits that advanced life forms remain idle until they detect a signal indicating a zero-risk strategy, from anywhere in the universe. The model suggests that constant abundance and reduced chaos, drive evolutionary progress toward a zero-risk state. Once this state is achieved, universal stress signals are transmitted at instantaneous speeds using wave-particle duality mechanisms, enabling Fermi life forms to emerge and interact. Consequently, these advanced life forms have likely always been present, awaiting the zero-risk signal to activate their potential.

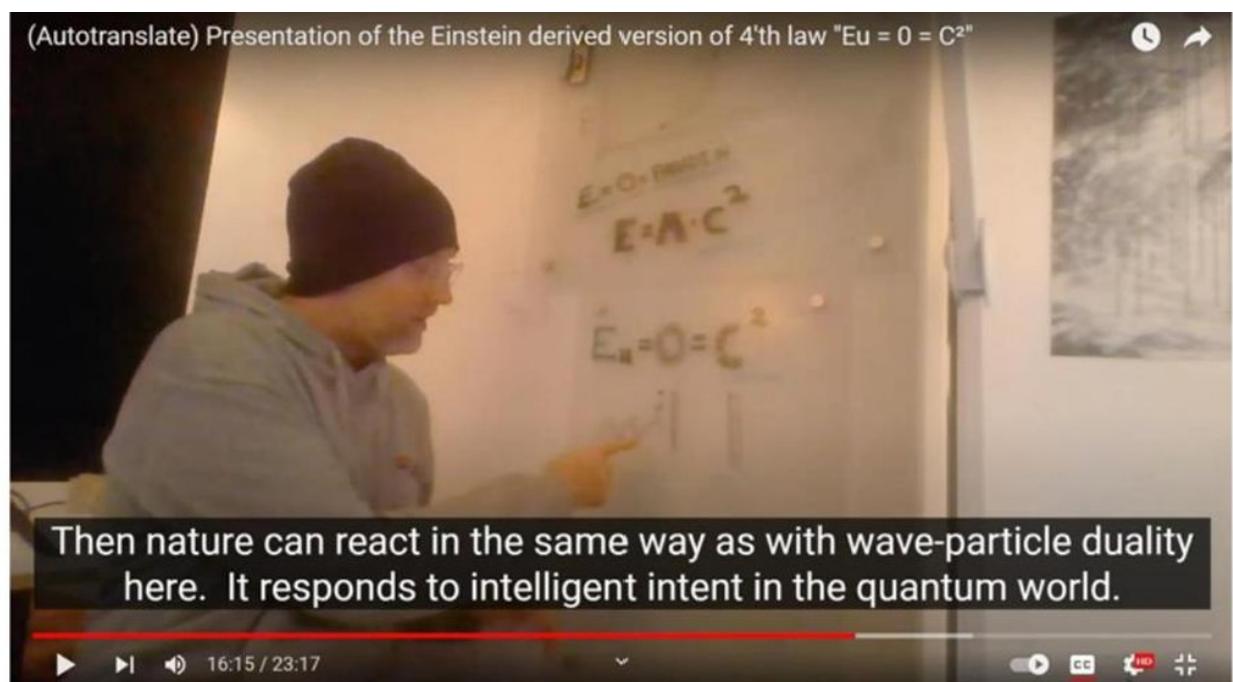


Figure 16. The third article suggested that the bizarre findings in wave-particle duality and in delayed choice quantum eraser effect is designed to alert nature of zero-risk strategies in the struggle for survival game. The added energy stem from what nature perceive as evil intent, relative to natures ego.



Figure 17. "A proof" that nature categorizes observation in the category 'evil intent' can be seen in monkeys. Often will signs warn people not to look at them as it can provoke an attack.

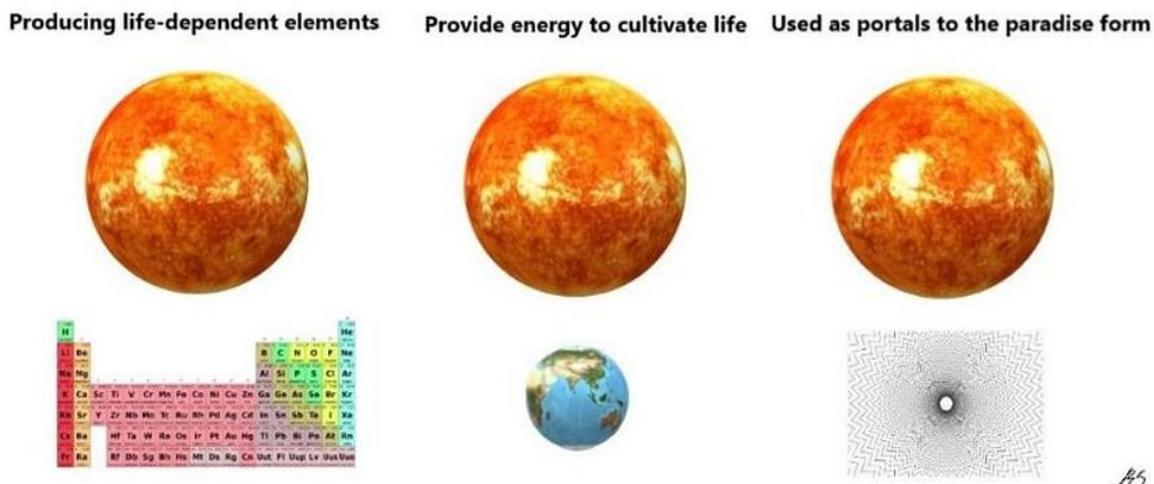


Figure 18. The sun planet should have at least three important roles in the paradise machine. 1. Providing and spread the chemical elements, 2. Provide energy to any emerging life form (as our sun planet does) and 3. Serve as portals between our mass-energy world to the massless world in the paradise state.

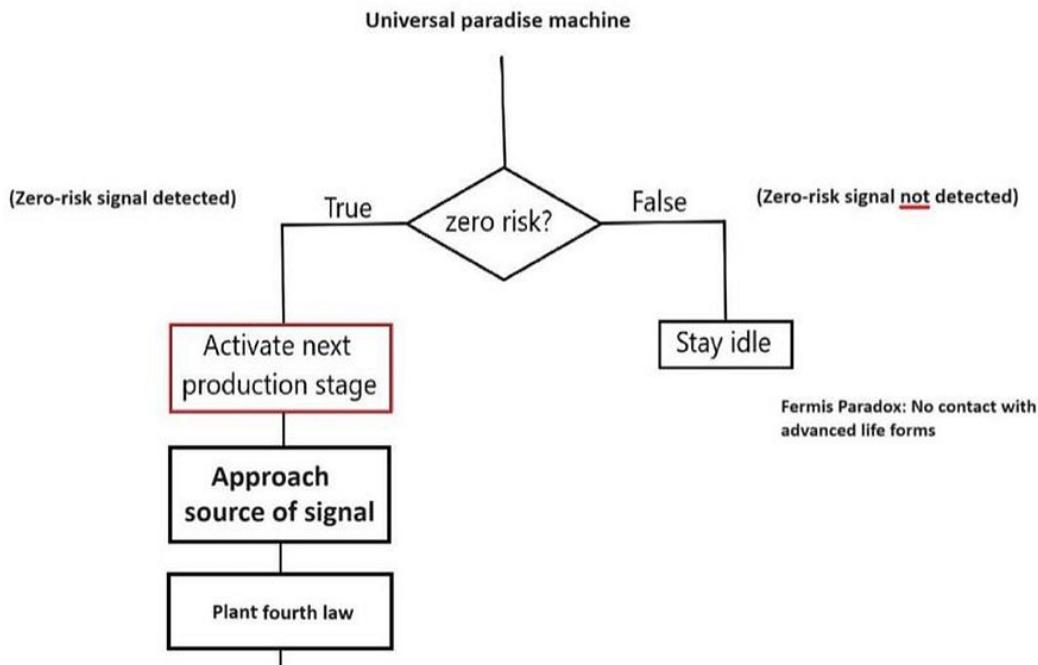


Figure 19. Illustration of an else-if function as it would be represented in the paradise machine model. It somewhat explains Fermi's paradox, suggesting that nature, or the paradise machine, remains inactive until a zero-risk signal is detected. Here also adding the approach theory as a natural response to a zero-risk signal.



Figure 20. In an attempt to gain an ally in nature I launched a zero-risk project in 2002 in the form of an artist. I never specifically told anyone about this purpose behind the project, as it would destroy the whole point of creating a zero-risk situation in nature. Ca. 3 years later, in 2006, the $\text{Eu} = 0 = \text{Paradise}$ formula was born. The question has now arisen; did this wild project actually worked?

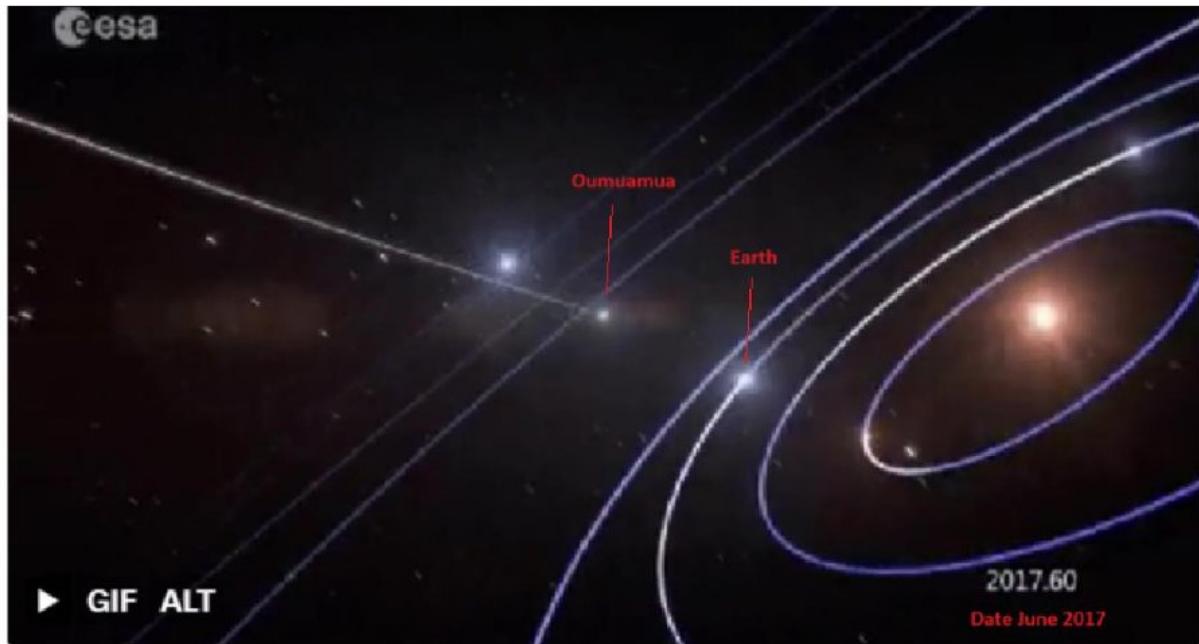


Figure 21. Oumuamua's location in our solar system in June 2017. The moment the ideas to the third article started (18'th of June 2017). Later it would nearpass the earth on October 15 and detected from Hawaii on October 19. Thereby its Hawaiian name Oumuamua, whic name means "a messenger from afar arriving first".



Figure 22. Actual screenshots of the facebook posts in question, before Oumuamua was discovered. Bottom: on the same day Oumuamua was discovered from Hawaii 19 October 2017. Hence connecting the name Head Biotech with the first registered visitor from outside our solar system ever recorded. Top: As the first idea to the third article appeared I updated this on fb. At the time my fb page was under the name: "Björn Olsen". I made the same update on Head Biotechs homepage. The update is still there if you scroll down to 2017 (headbiotech.com).

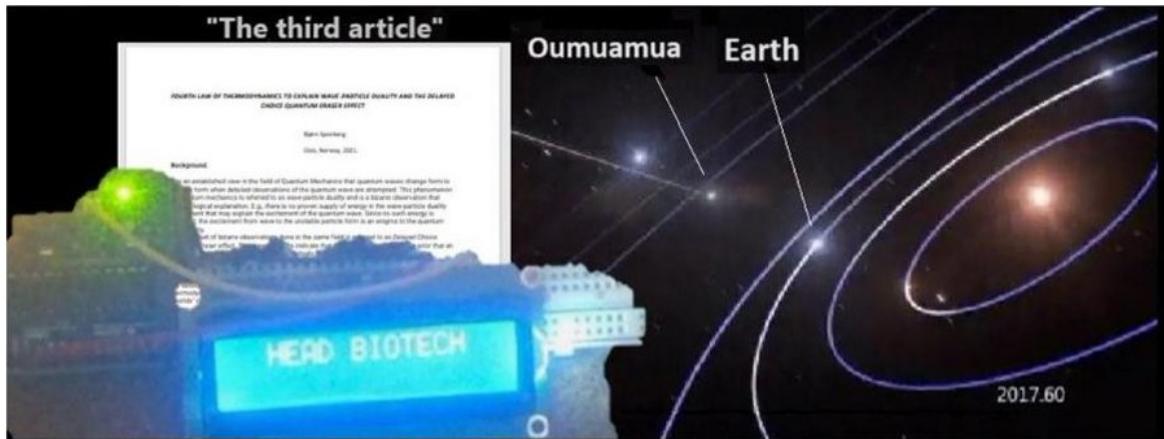


Figure 23. Graphical overview of "the third incident".



Figure 24. This drawing is the closest thing I have come to how the paradise women experience appeared in 2006. Then there was a village and a lake etc, but the age of the children and the looks and vibe of the women is very similar.

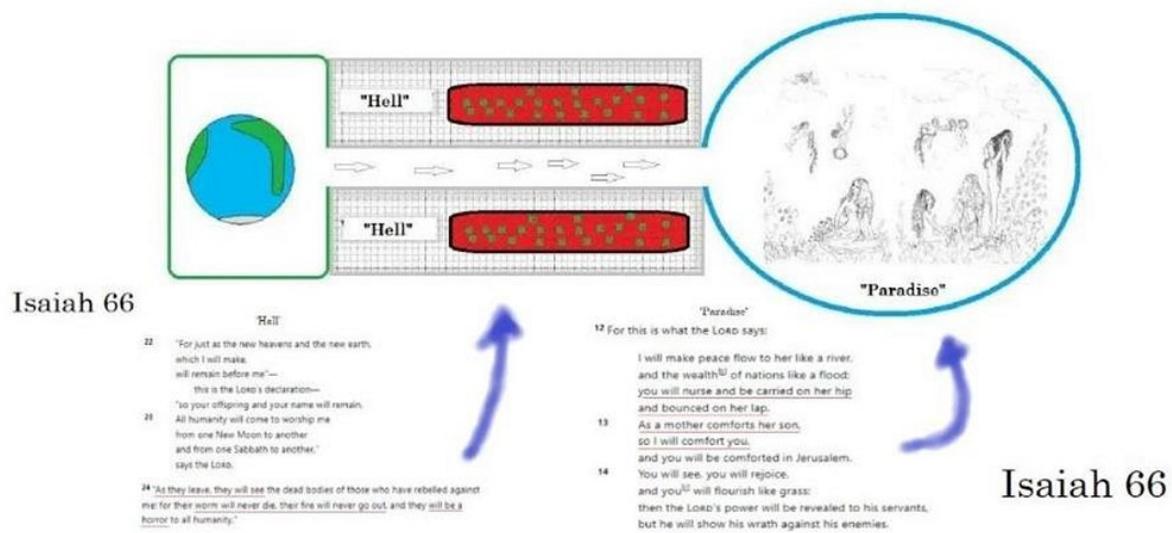


Figure 25. After launching the model, it was interesting to see that the paradise machine model is similar to how "heaven" is described in Isaiah 66.

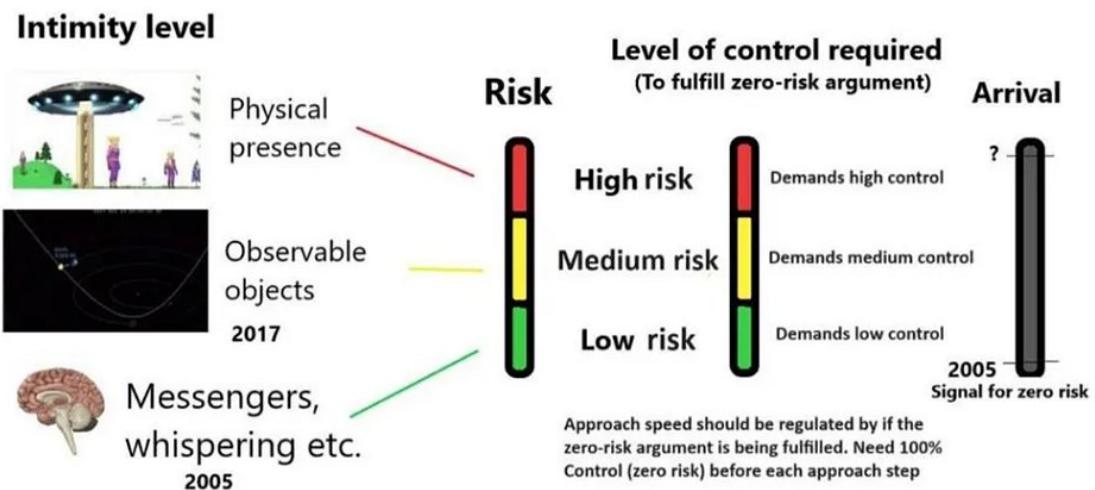


Figure 26. The zero-risk argument could be seen as something which controls the speed in their approach. According to the approach theory their signalling should increase in strength in the future, ending in a physical approach. At that stage their risk of approaching should be non-existent. Basically meaning that they are in 100% control of what takes place on earth as they arrive.



Figure 27. If this article series stem from Fermi life forms they will probably approach us more and more intensively in the future. They will probably come in different colors and shapes satisfying everyone on earth (fat, skinny, dark, white and so on..). since their risk will be zero as they arrive it will probably be an estatic event on earth. Since as they arrive everyone on earth will by then understand why they are here. Meaning that the paradise state is secured from there on.

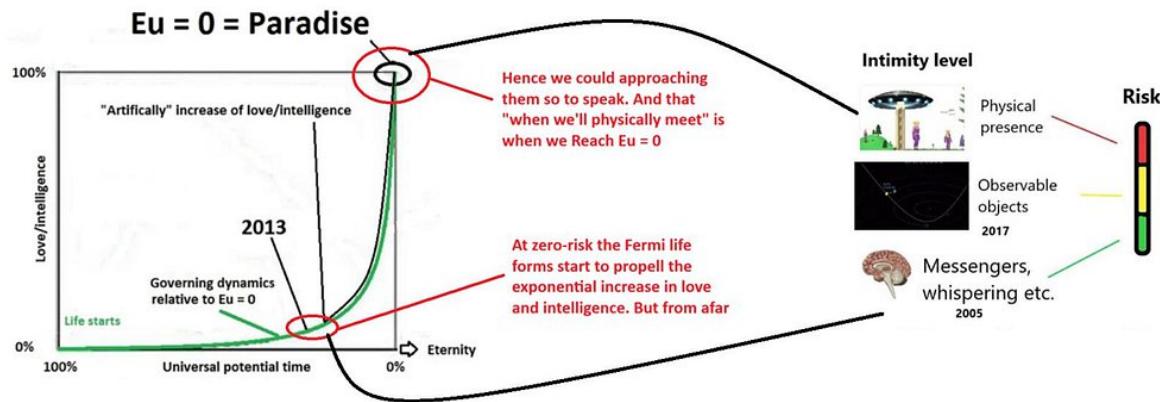


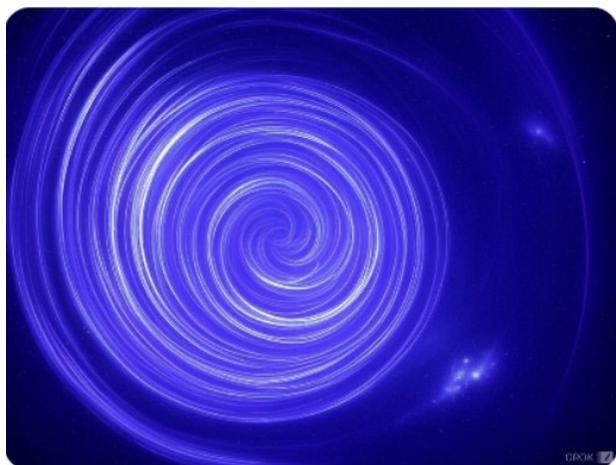
Figure 28. What could be discussed further is how the *approach theory* would affect the **4'th law graph**. It could also be that the "approach" ends at the top of the graph (that is when the meeting take place). And that from the point of zero-risk is when the Fermi life forms will slowly start to propell the exponential process toward this meeting point. In other words, the 'approach' in this scenario is that we are approaching them, and not the other way around. But they are actively propelling it

ILLUSTRATIONS

1. Final stage of the approach theory on earth. It's always interesting to see how AI interprets this event based on the content of the article.



2. Illustrating of the situation behind the event horizon according to the Einstein derived version of fourth law, $E_u = 0 = C^2$. The unit m^2/s^2 in C^2 creates the tunnel effect. Interestingly, the paradise machine model, independent of the Einstein-derived version, predicts this mathematical structure behind the event horizon, before the final paradise state.



3. How some of the different paradise states might appear at the end of the paradise machine, based on $Eu = 0 = C^2$ and the paradise women story.





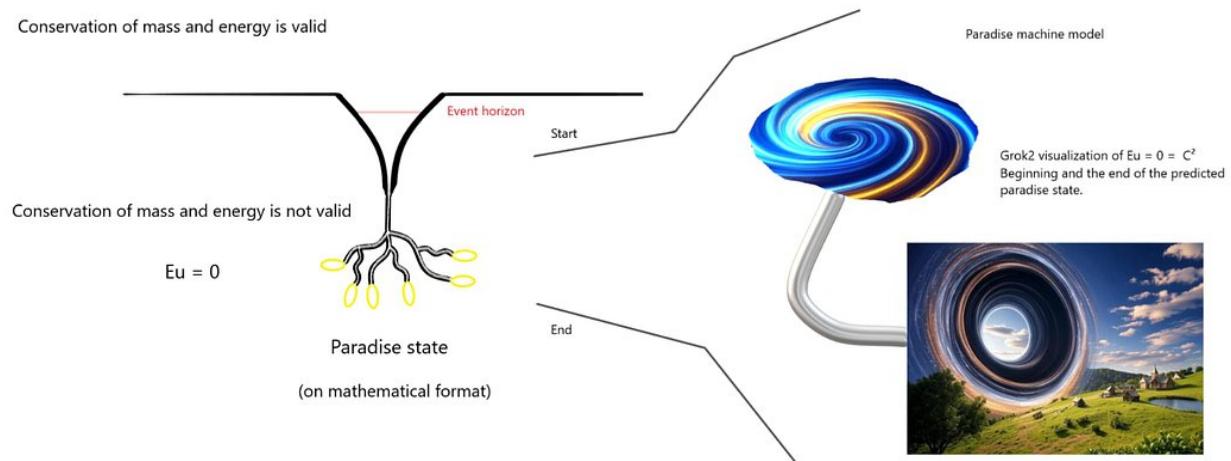
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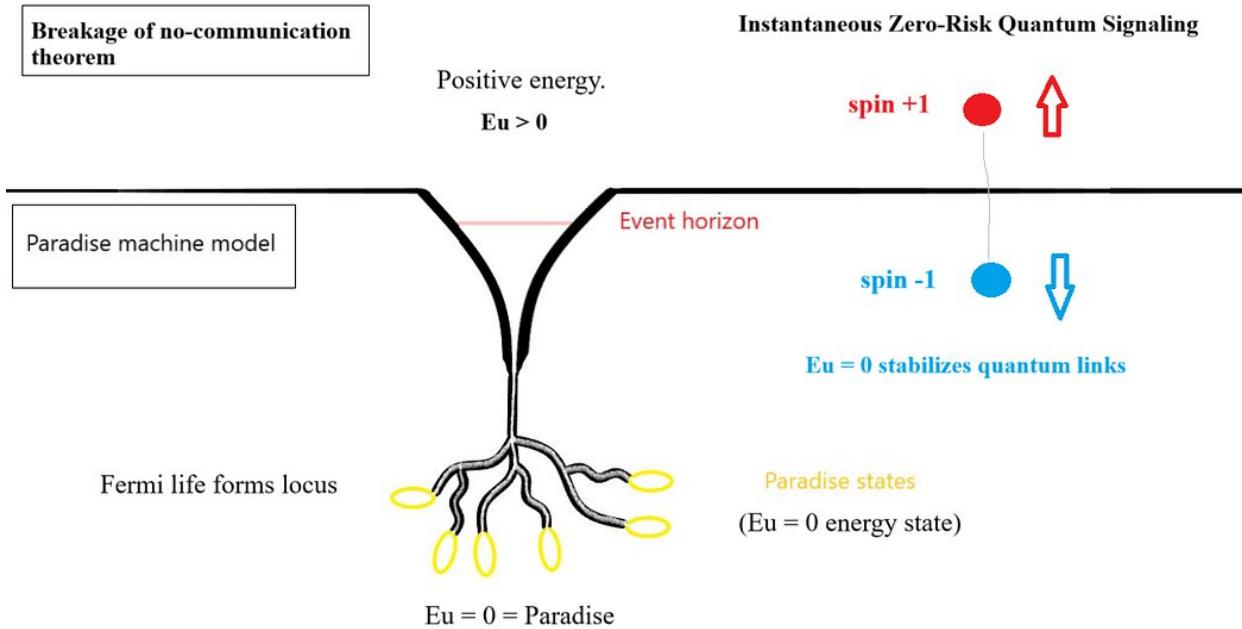


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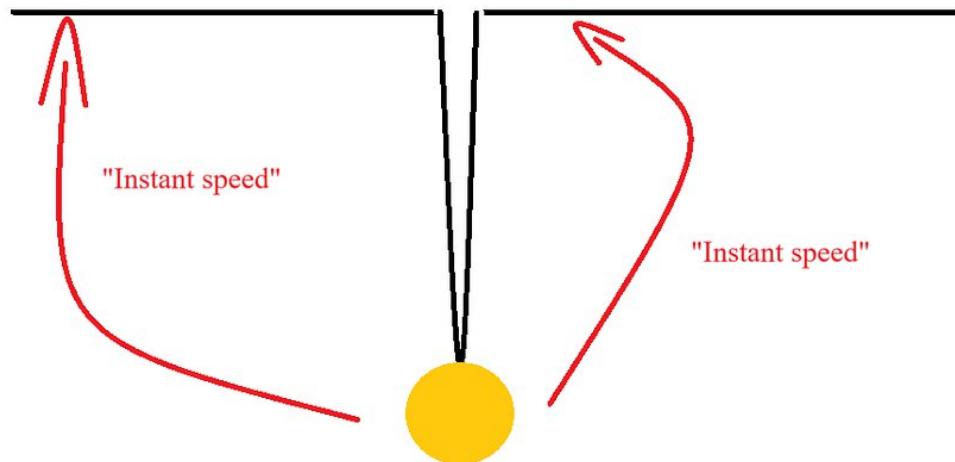
4. Summary illustration of the paradise machine. Based on the paradise women story, there ought to be innumerable states of paradises (yellow bulbes).





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Breaking the no-communication theorem via bending space (wormhole solution) is also an alternative.



The Fermi life forms suppose to be located here in the $E_u = 0 = \text{Paradise}$ state.
Bending Space "as they want".

References

Sponberg (2025). <https://medium.com/@sponberg1/quantum-entanglement-for-instantaneous-zero-risk-warnings-in-the-paradise-machine-notifying-fermi-98f8b2267cfe>

Einstein derived version: <https://youtu.be/Q4XqvoFUP38>

Paradise women
story: https://www.academia.edu/100795566/True_story_The_paradise_women

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X posts during the writing process: [Head Biotech \(@BSponberg\) / X](#)

- Hawking, S. (1988). *A Brief History of Time*. Bantam Books.
- Penrose, R. (1969). Gravitational collapse: The role of general relativity. *Nuovo Cimento Rivista Serie*, 1(2), 252–276.
- Event Horizon Telescope Collaboration. (2019). First M87 Event Horizon Telescope Results. I.

The Shadow of the Supermassive Black Hole. *The Astrophysical Journal Letters*, 875(1), L1. doi:10.3847/2041-8213/ab0ec7 • Thorne, K. S. (1994). Black holes and time warps: Einstein's outrageous legacy. *Scientific American*, 271(1), 32–37. • Einstein, A. (1905). Ist die Trägheit eines Körpers von seinem Energieinhalt abhängig? *Annalen der Physik*, 18(13), 639–641. doi:10.1002/andp.19053231314 • Fourier, J. (1822). *Théorie analytique de la chaleur*. Paris: Firmin Didot Père et Fils. • Clausius, R. (1865). Über verschiedene für die Anwendung bequeme Formen der Hauptgleichungen der mechanischen Wärmetheorie. *Annalen der Physik*, 201(7), 353–400. • Nash, J. F. (1950). Equilibrium points in n-person games. *Proceedings of the National Academy of Sciences*, 36(1), 48–49. • Ball, J. A. (1973). The Zoo Hypothesis. *Icarus*, 19(3), 347–349. • Hawking, S. W. (1974). Black hole explosions? *Nature*, 248(5443), 30–31. doi:10.1038/248030a0 • Hawking, S. W. (1976). Breakdown of predictability in gravitational collapse. *Physical Review D*, 14(10), 2460–2473. doi:10.1103/PhysRevD.14.2460 • Susskind, L. (1997). Black holes and the information paradox. *Scientific American*, 276(4), 52–58. doi:10.1038/scientificamerican0497-52 • Kerr, R. P. (2023). Interview on singularities in black holes. [Source of Interview, e.g., *Physics Today*, or a specific event or publication]. • Robin's Eye Project:

<http://www.wired.com/2011/01/quantum-birds/>

Andrew Strominger: Black Holes, Quantum Gravity, and Theoretical Physics | Lex Fridman Podcast #359 • Nomoto, K., Tominaga, N.,

Umeda, H., Kobayashi, C., & Maeda, K. (2006). Nucleosynthesis in supernovae. *Nuclear Physics A*, 777, 424–458. • El-Badry, K., & Quataert, E. (2021). A single-lined spectroscopic binary orbit for the candidate stellar-mass black hole Gaia BH1. *The Astrophysical Journal Letters*, 919(1), L1. • Seligman, D., & Laughlin, G. (2023). The Yarkovsky effect and the nongravitational acceleration of ‘Oumuamua. *The Astrophysical Journal Letters*, 945(1), L12. • Meech, K. J., Weryk, R., Micheli, M., Kleyna, J. T., Hainaut, O. R., Wainscoat, R. J. (2017). A brief visit from a red and extremely elongated interstellar asteroid. *Nature*, 552(7685), 378–381.