Foundations of Physics:
A Closer Look at Space and Time

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I. Prooimion

1. Epitome

This work attempts to discuss central inconsistencies in modern physics from the perspective of limited rate of change, relying solely on observation and logical deduction. Starting from an reorganisation balance within the observable world, it constructs a minimal and plausible geometry of a higher-dimensional state space, thereby establishing a self-consistent model. By examining the projection into the observation space, this approach allows for a reappraisal of the symmetries of space and time, the compatibility of relativity and quantum mechanics via the fine-structure constant, and the possibility of a deterministic digital physics as a whole.

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3. Prologos

- Around Existence in Thirty Days -

a. Basic motivation and the role of AI

“Hello, I’m Chris, and I’ve been suffering from cognitive dissonance ever since my physics studies.”

This sentence would have described my state of mind until just a few days ago. The clarity and structural simplicity I had always admired in Einstein no longer seemed to have a place within the baroque edifice of modern physics, with its countless of gauge theories and their countless free parameters.

My “therapy” consisted of an open and unprejudiced discourse with a technical entity that carries large parts of our collective knowledge within it. Exactly how vast that knowledge is did not matter to me at that moment - but a major advantage was that this knowledge was certainly greater than anything anyone would have had access to even a year ago.

For this reason, I would first like to express my gratitude to everyone who contributed to making such systems possible.

b. Basic idea of the reorganization

In retrospect, this discourse was remarkably focused. From the very beginning, the discussion revolved around black holes (the standstill of time) and dark matter (the Bullet Cluster) - all within the tension between the equivalence principle, relativity, and Ockham. My fundamental trust in the beauty of physics gradually resurfaced.

It was obvious that dark matter must be related to ordinary matter, as it proves to be its persistent companion. However, collisions reveal an interesting anomaly: Something in the matter “forgets” to slow down. I interpreted this as the exhaustion of an underlying, but still undefined, reorganization potential - a clear indication of a conserved quantity.

The only remaining question was: What is being reorganized, when, where, how - and above all, why? But let’s take it one step at a time.

II. Topoi

Topos 1: Law of Quantized Reorganisation Rate (LQRR)

- The accounting of presence within the observable domain -

a. Approach

The **equivalence principle** [Newton@1687,Einstein@1907] equates gravity and inertia. Gravity is the **static** (timeless) signature of physical presence (mass). In this context, inertia is defined here as **dynamic resistance to change** (resistance to reorganization) because a) it is time-dependent in every form (dynamic) and b) generates a force that opposes change (reorganization).

We now identify Omega as the **total conserved quantity of presence**, consisting of a static and a dynamic component:

Omega = E_stat + E_dyn

b. Derivation

- **Rest energy** [Cockcroft/Walton@1932]: The rest energy "E_stat = m c^2" is the timeless signature of mass "m".
- **Energy quantization** [Millikan@1913]: The change (reorganization) "E_dyn = n E_q" is quantized and follows an integer clock rate "n".
- **Minimal energy quantum** [Planck@1900,Ockham@1323]: The reorganization occurs in stages of "**E_q = h_bar / t_p** = h_bar * c / l_p".
- **Conservation Law (LQRR):** The combination of both components yields the total conservation quantity of presence.

Omega = m c^2 + n E_q

c. Result

This provides us with a conservation law that may appear unspectacular at first glance, but serves primarily as an anchor to the observable and a hopefully stable foundation for what follows. However, essential characteristics are still recognizable at the core:

- **Costs:** Reorganization is synonymous with change; every process consumes measurable quanta of time.
- **Clocking:** Time is quantized and functions (for now) as a discrete clock rate of reality.
- **Neutrality:** Up to this point, no explicit assumption about geometry has been made; this is a purely energetic balance.
- **Consistency:** The accounting is fully compatible with classical Lagrangian formalisms and can be directly verified within that framework.

Topos 2: Theory of Euclidean Quantum Reorganization (TEQR)

- The generalization to structural completeness in an Pseudo-Euclidean manifold -

a. Approach

Analogous to rest energy, whose static potential is limited by “c^2” [Michelson-Morley@1887], the **invariance** of the reorganization potential “Omega” justifies the existence of a higher-dimensional invariant: a kind of **maximum reorganization rate** “c_rt^2” of spacetime.

b. Core Derivation

- **Indirect quantization** [LQRR]: The balance form “Omega = n_stat E_q + n E_q” renders the rest mass “m” a discrete quantity and thereby indirectly provides a quantization of “E_stat”.
- **Symmetry assumption** [LQRR,Ockham@1323]: Since the model under consideration does not require any assumptions about a separation between static and dynamic quanta (neutrality), and we believe we have already identified a minimal energy quantum, we choose the minimal identification “n_stat = n”.
- **Conservation Law (TEQR):** The combination of both components yields the total conservation quantity of a presence in spacetime.

$$\mathbf{Omega = m\ c\_rt\hat{}2 = 2n\ E\_q}$$

By reversing a difficult-to-justify postulate at the beginning to a derivation of the invariant “c_rt” and the factor “2”, we can now make statements about the geometry more concrete.

- **Geometric Relationship** [Euclid@-300, Ockham@1323]: The invariant “c_rt^2 = c^2 + c_t^2 = 2 c^2” implies the existence of **orthogonally independent space and time dimensions** at the macroscopic scale. The spacetime structure thus comprises **three spatial and at least one temporal axis**.
- **Constancy with GR** [Will@2014]: The experimental confirmation of the General Theory of Relativity verifies a **factor of two** in the coupling of space and time effects compared to purely spatial models.
- **Inner degrees of freedom** [Burgess-Moore@2006]: The experimentally verified gauge symmetry “SU(3)×SU(2)×U(1)” requires **three additional internal degrees of freedom** (charge, isospin, color charge) to describe all known elementary particles, extending beyond the three observable spatial degrees of freedom.

- **Minimal Dimensions** [Ockham@1323]: The number of dimensions required to describe nature must be restricted to the minimum; abstract “inner spaces” are therefore to be identified as physical dimensions. The minimal spacetime structure thus comprises (at least) **three spatial and three temporal axes**.

This is one of the indications that even misguided paths can ultimately lead to the goal. The idea behind introducing complex numbers was originally to obtain a sign change in the time dimension for antimatter — but it did not resolve the issue.

- **Local coupling**: A **stable structure** of the observable world requires a local coupling.
- **Complex Coupling** [Ockham@1323]: The complex number represents the minimal consistent form of coupling. Together with the invariant “c_rt^2”, it defines a 45-degree offset between the spatial and temporal axes.

c. Extended Derivation

At that point, I believed I had already reached a milestone - a kind of lower limit for a consistency (Euclidean) state space - and wanted to introduce the now-necessary projection in general for the sake of completeness, before detailing its consequences in the following chapter.

- **Projection**: Everything observable must be viewed as a result of **fractured projections** of the underlying **higher-dimensional structure**. Space and time, motion and interaction, are its manifestations in our known world.
- **Matter/Antimatter Sign** [Anderson@1933,Alpha@2023]: This Experiment confirms two stable coupling orientations that **differ exclusively in their sign.**
- **Projection metric:** The only **sign-preserving** and simultaneously simplest form of projection is the **L1 metric (Manhattan)**.

Two metrics must be one too many, and the mistake, of course, already lay in an implicit “Euclid” assumption in the geometric treatment of the invariance (Wilhelm scream) [Wolley@1951]. The issue was: one cannot simply abandon it, as it constituted the connection to relativity theory. A sleight of hand had to be the solution.

- **Metric Convergence:** The **measurable metric** of an L1 structure (Manhattan) always converges macroscopically toward L2 (Euclid). Explanation: In the extreme case of only two measurements (starting and ending points), a line is generated, thus creating the **illusion of Euclidean geometry**. This can also be understood as an empirical resolution to the **staircase paradox**.

How could one possibly decide, from within the observation space, which metric a higher-dimensional state space possesses if our measurement precision is insufficient for such a task? Fortunately, there already existed a compendium of failed derivation attempts, complete with their justifications.

- **One-Photon Thesis** [Bothe/Geiger@1925]:** The discrete structure of the axes permits only minimal state changes. The smallest non-trivial variation corresponds to an **elementary unit of transfer** - a single, universal step that physically appears as a **photon**. The analysis of these transitions suggests an underlying L1 structure.

Taken together, these two points form the **bridge from microscopic quantum mechanics to macroscopic relativity**. A more elegant connection could hardly be established, as there now exists only a single metric describing the fundamental state space, its external coupling, and its projection into the observation space - fully compatible with my derivation (inverse Wilhelm Scream).

d. Result

The result of the derivation does **not claim to be physical reality**. It is a purely logical construct and provides an estimate of what **the smallest physically consistent state space** might look like. For this purpose, relevant observations were consolidated, and any complexity exceeding the required minimum was consistently avoided.

On the other hand, it must be clear to everyone that this concentrates the entire decision on a single point: **If Ockham is right, the model becomes reality.** - and this despite the 480kg chemical **explosive power** of one energy quantum.

- **State space**: The derived **Manhattan structure** "**3r+3t**" forms a **6-dimensional state space** with complex internal and additive external coupling. The states correspond to reorganization potentials, a vector within them describes the reorganization itself (change) and the invariant "c_rt^2" acts as reorganization resistance. The grid spacing of the rigid structure is "l_p" or "t_p = l_p / c" and the external coupling is achieved via energy quanta of the size "E_p = h_bar / t_p". The metric, external coupling, and projection onto observable time are uniform.

- **Self-consistency**: All structural elements — discretization, metric, external coupling, and projection onto observable time — are based on the same fundamental normalization. As a result, the model is **entirely self-contained** and requires no additional assumptions.

- **Supersymmetry:** The state space possesses a distinct structural symmetry, as the two subspaces and their three axes are fully equivalent. This equivalence arises from their shared normalization, grid, and invariance.

- **Freedom from singularities:** The state space is free of singularities because its **discretization is strictly bounded**. No states exist below these scales, so singularities and divergences are **in principle excluded**.

Embolimon

a. Tools

- **Naming of Spaces:** The three relevant spaces are designated as follows.
  - "**33**"**:** the undirected fundamental L1 state space "3r+3t",
    with the binary states "0" for free and "E_q" for active
  - "**3rT**"**:** a directed projection space "3r → 1T",
    with the metric "T(t) = L1(t)", our observation space
  - "**3tR**"**:** a directed projection space "3t → 1R",
    with the metric "R(r) = L1(r)", a "counter-world" (prediction)
- **Definition of Spacetime Vector**: We define the complex direction vector in the state space "3r+3t" as the **Spacetime Vector** "**u(r,t)**" (unified). It depends on a spatial vector "r" and a temporal vector "t".
  - **Observable World**, Matter/Antimatter: "u = r +/- i t"
  - **"Counter-World"**, Matter/Antimatter: "u = t +/- i r"
- **Vector blindness:** This denotes the **restricted perception** in the two projection spaces, in which time or space is not perceived as a complete vector, but only in the form of the respective projection.
- **Arrow of Time:** In the observation space, there exist **two time directions** of projection, a positive and a negative "T = L1(t)". From our perspective, matter reorganizes by definition toward the positive "T". The direction of change itself thus corresponds to **the future**, while the opposite direction represents visibility, storage direction, and ultimately also **the past**.

b. Consistency

Before the model can even be evaluated, it must be verified whether it is compatible with the observable properties of the physical world. This examination serves to determine whether the logical construct qualifies as a minimally consistent state space.

(Foundations)	**Inherence**	**Justification**
Mass-Energy Equivalence	yes	Fundamental assumption of LQRR
Quantization of Action	yes	Part of the derivation of LQRR
Invariance of Light Speed	yes	Fundamental assumption of TEQR, invariance
Matter-Antimatter Symmetry	yes	L1 structure, sign of projection
Gravity	yes	Gradient of the reorganization potential
Relativistic Effects	yes	Transition LQRR/TEQR, m(t) instead of r(t)
Non-Locality, Entanglement	yes	3t-neighborhood in state space

(Table 1: Consistency check based on physical reality)

In the observation space, interactions arise from gradients of the reorganization potential within the state space. Every directed change in this potential correlates with a force acting in the observation space.

(Gradients)	**dT = 0, Static**	**dT > 0, Dynamic**
dr != 0, dt = 0	Gravitation	Inertia
dr != 0, dt != 0	Strong interaction	Weak interaction
dr = 0, dt != 0	Oscillations	Electromagnetism

(Table 2: Overview of forces in the observation space 3rT)

Applying this scheme to matter itself yields an equally clear classification for elementary particles.

(Gradients)	**dT = 0, Invisible**	**dT > 0, Visible**
dr != 0, dt = 0	2x “Dark Matter” Type	Up/Down Type
dr != 0, dt != 0	4x “Hadronic Ground States”	Charm/Strange/Top/Bottom
dr = 0, dt != 0	2x “Sterile Neutrins” Type	Charged/Neutral Leptons

(Table 3: Overview of particle types in the 3rT observation space)

c. Phenomena

The following considerations are mapping the properties of the underlying 33-structure onto the observable 3rT domain.

No.	Phenomenon	Explanation	SM+ET	TEQR
1	Quantum Entanglement	Shared t-vector	-	1
2	Uncertainty Principle	Indeterminacy of the t-state	-	1
3	Spin-Statistics	Internal complex state rotation	-	1
4	Wave-Particle Duality	Metric Convergence	-	1
5	Measurement Problem	Information compression through projection	-	1
6	Local Realism	Identity within the state space	-	0.5
7	Feinstrukturkonstante	Transition at the Metric Fracture	-	1
8	Strong Force, Confinement	Timeless lattice binding	0.5	0.5
9	Neutrino Masses	Extreme projection angle	0.5	1
10	Strong CP Violation	Storage direction in the observation space	-	1
11	Matter-Antimatter Asymmetry	Inverse time vector	-	1
12	Hierarchy Problem	Subdimensional gradients	0.5	0.5
13	Singularities	Incompatible gauge theories	-	1
14	Planck radiation law	Invariance c^2 in t-space	-	1
15	Vacuum Catastrophe	Unbound reorganisation potential	0.5	1
16	Dark Matter	Bound projection load	-	1
17	Dark Energy	Free projection advance	-	1
18	JWT-Galaxien	Reorganization maximal in empty space	-	1
19	Arrow of Time	Storage direction in the observation space	-	1
20	Origin of Spacetime	Projection of state space	-	0.5
21	Unified Theory	Scientific consensus	0.5	-
=>	**Total**	**Resolved Phenomena**	**2.5**	**18**

(Table 4: The 20+1 greatest unresolved physical phenomena)

d. Fine-Structure Constant

This is probably the most inglorious aspect of this work. Each solution suffered from either an inexplicable **inexplicability**, a non-decoupled basis, an error in the double-digit PPM range, or several of the above. The shortcut directly to the “final boss of all theories” failed spectacularly. After four sleepless nights, I had to retreat in defeat, with the consolation prize of having at least learned something.

alpha^-1 = (2^7 + 3^2) + 4 *Pi* sqrt(7) * 2 *w_sr2* / (*4* * (2^7 + 3^2) – 7)
with w_sr2 = (sqrt(2) - 1) / sqrt(2)

- **Metric Dilation:** Within a 3D lattice, due to **Metric Convergence**, the statistical mean of a point's projection onto the principal axes (x, y, z) is exactly "1/2" per axis. A fundamental L1 lattice thus appears macroscopically extended by the **factor "3/2"**, since states have to take a "detour" along the grid. The **metric efficiency** "f_w = (f_l - 1) / f_l" generated by this elongation "f_l" is **"1/3".**
- **Metric Break** [Legendre@1786]: In the gap around the Legendre singularity "sqrt(7+/-0.5)", two phenomena converge. When constructing a sphere from cubes, it becomes **impossible to occupy specific positions**, and the (resulting) correction abruptly exceeds the magnitude of the elements themselves; a form of **indistinguishability**. It is a structural no-man's-land between Manhattan (inside) and Pseudo-Euclid (outside). It is reasonable to assume that a) "**sqrt(7)**" **is the exact point of equilibrium** and b) that it is a purely geometric problem of quantization in conjunction with the **Metric Convergence**.
- **Existence of Alpha:** The mere existence of the Sommerfeld or fine-structure constant makes a coherent **Euclidean space virtually impossible**.
- **Gilson Formula** [Gilson@1991]: I bow my head to the **numerologist J. G. Gilson**. Without knowing the physics behind it, he decoded the underlying essence of Alpha (a complex rotation) and - as far as I can judge - calculated it consistently with my theoretical framework.

e. Anticipations

Here is an attempt to describe my aversion to predictions using a thought experiment: Assume that everything measurable has been measured, and the only remaining questions are those that current theories unable to answer. In such a case, would not every new theory automatically be deemed “unscientific” because it offers no new predictions, but merely provides solutions to these questions or better interpretations?

- **Maximum Density** [Planck@1900]: The mass equivalent of “E_q = h_bar / t_p” within a cube of edge length “l_p = c * t_p” yields an upper density limit of “rho_max = E_q / (c^2 * l_p^3)” corresponding to the (so far purely theoretical) Planck density of “**5.15 * 10^96 kg/m^3**”.
- **Manhattan oscillations** [Brown@1828]: Within the observation space, measurements in the scale of minimum quantization exhibit **apparently random fluctuations** arising from the L1 projection of the temporal vector. Within the state space, these fluctuations correspond to **deterministic, L1-invariant oscillations** along the underlying lattice. The macroscopically observable effect is **Brownian molecular motion**.
- **Spectral Diffusion** [Hawking@1975]: In the observation space, matter exhibits a minimal but continuous decay of structural order, which appears as a **weak energy loss**. This effect becomes clearly visible only at extreme interfaces, such as in the form of **Hawking radiation**. Within state space, it corresponds to a free, T-invariant reorganization rate.

These three examples are deliberately chosen, but ultimately they are completely arbitrary. The absence of singularities demanded a maximum density, a deterministic L1-structure had to manifest itself in the observation space as well, and flawless “aeon-old artifacts” are simply old news.

- **Consistency Cascade:** A self-consistent system is highly logically interconnected and allows **no isolated solutions**. Clarifying one question triggers a chain reaction of further obvious correlations. All paths lead to “Quintessentia-33”.

f. Comparison

In principle, the work was **not intended as a counter-proposal* to traditional physics. It evolved in that direction on its own over time - or perhaps it simply had to. After more than three decades without any engagement with physics, and having developed this work in less than thirty (intense) days, such an claim would have been presumptuous anyway.

The decision ultimately does not lie with the author: Does one prefer a heterogeneous system with arbitrary adjustment parameters to only partially explain the observed world; or does one accept a higher-dimensional geometry from which the observed world almost inevitably emerges as a consistent whole?

(Comparison)	**SM+ET**	**TEQR**
Explanatory Model	Postulates, Interaction Fields	Digital Transformation
Mathematical Basis	Differential Geometry, Fields	Integer L1 Arithmetic
Basis Metric	L2 Continuum, Euclid	L1 Grid, Manhattan
Observational Metric	Minkowski	Pseudo-Euclidean
Theoretical Unit	Fragmented, Incompatible	Inherent, Consistent
Degrees of Freedom	>= 120	= 6
Gauge Parameters	>= 26	= 2
Foundations (out of 7)	= 7	= 7
Explained Phenomena (out of 21)	~ 2.5	~ 18
Fantasy Index*	~ 15.37 (=146f/9.5p)	~ 0.32 (=8f/25p)

(Table 5: Comparison of modern physics with the TEQR-33/3rT model)

Topos 3: Concept of Self-Aware Grid Coupling (CSGC)

- A singular phenomenon in a complete Pseudo-Euclidean reality -

a. Approach

Glad that Einstein had been right in his skepticism towards Minkowski, and at the same time saddened because he was also right with “God does not play dice” [Fölsing1993], it was clear that the story could not end there. A model that describes reality with sufficient accuracy and is at the same time self-contained inevitably enforces determinism. And if one refuses to accept that, there is no choice but to keep investigating - and in doing so, to lean far out of the window.

- **The Ockham-Gödel Dilemma**: Imagine Ockham and Gödel meeting in a pub and discussing our state space in relation to self-awareness. However, they cannot reach an agreement.

  Ockham: “If self-awareness does not belong to our physics, but is observed by us, then it must quite simply originates from the counter-world.”

  Gödel: “But we all belong to a single state space, and since this is no longer indeterminable, it must be incomplete. Self-awareness definitely comes from the outside.”

b. Derivation

- **Gödel’s brother:** Fortunately, Gödel’s younger brother had also come along, and he was promptly appointed referee.

  Brother to Ockham: “If you were right, our world would be incomplete because it is determinable. Is that really what you want?” - Ockham shakes his head.

  Brother to Gödel: “But neither incompleteness nor indeterminacy bothers you; therefore you must be right. Self-awareness comes from outside. We likely pull the human on like a glove.”

- **Grid Coupling (CSGC):** While signatures within the state space can serve as markers for external coupling, they must not exert any influence on the states themselves. Since any direct change in state space would have physical consequences, the only possible external influence is a distortion of the rigid grid itself - in this case, a lattice.

c. Result

The goal has been achieved, and I do not have to label our reality as deterministic, despite a fully determinable state space. For that reason, I will keep it brief.

- **Psychological Phenomena:** Some symptoms might, upon closer examination, turn out to be disturbances of a synchronization process. This would indicate that a coupling is approaching the limits of its coherence.

III. Apotheosis

1. Analecta

a. Enterprise: Trapped in Minkowski Space

The year is 1908. The U.S.S. Enterprise, carrying a delegation of high-ranking Federation physicists, is en route to Quintessentia-33 when, due to a momentary lapse in attention by its commander, A. Eggnstein, they are stranded in Minkowski space. His otherwise infallible navigator had fatally linked the necessary time correction to space itself, instead of (as recommended in the Starfleet Manual, page 26) to mass.

Since then, the Enterprise has been drifting hopelessly through a static four-dimensional field, surrounded by a dense nebula of cognitive dissonance that reliably neutralizes any clear insight. Aboard the ship, a state of active bewilderment prevails: The crew has been debating for decades whether they are standing still or if movement has simply become impossible. No one realizes that they are trapped within a geometry that exists only because everyone assumes everyone else has understood it.

Over a hundred years later, a ship appears that shouldn't exist at all, but did so anyway (owing to a mumbling esotheologian in league with a borderline-moronic vending machine): the U.S.S. Invariant.

Equipped with the most massive symmetry generators ever condensed from quantum noise by a replicator (and which, according to safety protocol, were never supposed to be switched on simultaneously), she can cruise through Minkowski space without danger. She has come to finally liberate the Enterprise from the prison of curved spacetime.

After the shuttle transfer (a Klingon "Ethics Commission" with their #tele!murder social media campaign had effectively forced the Federation to decommission all transporters), the commander can be heard ranting: "They might as well have let God-knows-who roll the dice." He suddenly grasped the full extent of the tiny error. After a moment's thought and a deep sigh ("consequence-free task redesign" had been a highly sensitive topic since #save! space), he appointed his bathroom scales as the new "advising chief navigator"; he knew the uncanny precision with which it predicted the seemingly random interplay of mass and time.

Some time later, the Invariant's gigantic symmetry generators howled in agony, a glittering field enveloped both ships, and with its merciless light, it revealed the hypnotic entanglement of the dimensional pocket. With unwavering determination, the ships steered toward the Legendre gap in the fine structure that had opened before them - course set for Quintessentia-33.

b. Modern Physics in Ockham's Mirror

Should even a fraction of the theses developed herein withstand scientific discourse, a significant portion of current theoretical frameworks could immediately transition into the status of "historical physics". This raises the interesting question of how such a **stable information bubble** [Kuhn@1962] could have solidified over decades.

One reason lies in the attempt to correct a system **from within**. An undertaking that cannot be mastered due to its self-reference [Gödel@1931]. Self-imposed barriers then do the rest: "Minkowski Mind-Prison", "Subatomic Dead-End" … :o)

In the end, the realization remains that the resilience of a conceptual framework does not lie in its mathematical complexity [Giger@1977], but in the consistent reconnection of each individual element to simplicity [Ockham@1323] and observation itself.

c. The Uninvited Guest, Parts 1 and 2

Sunday morning, very early, a doorbell wakes me up. My buddy Janus is standing at the door, grinning at me. We have a rather complex relationship, but basically he's a great guy.

He holds something out to me and says, "Aren't you missing something?" Triumphantly, he presents me with my antimatter. Shock! I hadn't even noticed that it must have fallen out of my new Sixdi backpack at some point. And then he holds out a plastic tag with two symbols on it. "Gift from the house!" he says with a wink, leaving me standing there dumbfounded in the doorway.

Relief quickly gave way to frantic panic. This plastic sign was transparent! No matter which way I held it, the plus sign always showed through. That was it for me. Maybe I could exchange it for something suitable, but as it was, it was completely useless. I had to go back to Janus.

In the corridor I meet my neighbor from across the hall, an old man with a hat, who already seemed to be having trouble with the stairs.

He clears his throat: "Excuse me, sir. I couldn't help but overhear your conversation; and I'd like to give you something as well. This was truly solid craftsmanship." He hands me two solid, shiny badges, the symbols neatly engraved and colored black. I thank him politely with an extra-deep bow, tip my imaginary hat to him - he smiles - and then help him down the stairs. I'm sure: these badges will make my backpack unique over time.

2. Epilogos

“I stand before you, between hubris and despair, want to say so much, but know it is enough. My deepest gratitude with you, esteemed audience, bravely joined this quest with me. Thank you …” (Sudden silence, suppressed emotions, a brief bow, and after a short pause - the curtain falls.)

3. Eucharistia

- **Dedication:** In honor of my most important mentor, Dr. Dieter Spies, for his lifelong inspiration.
- **Donations**: If you found this research helpful, please consider supporting the author with a contribution that may even reflect the provided value.
- **AI Assistance Disclosure:** This work was developed in collaboration with an AI. The role of the AI was essentially limited to continuous discourse, reviewing logical consistency, editorial assistance, and translations. All concepts, derivations, and structures are the original work of the author.

4. Bibliographia

- Euclid of Alexandria (ca. 300 BCE): Elements (Stoicheia), Book I, Proposition 47.
- Ockham, William (1323): Summa Logicae — “entia non sunt multiplicanda praeter necessitatem”.
- Newton, I. (1687): Philosophiae Naturalis Principia Mathematica. London.
- Legendre, A.-M. (1786): Memoire sur la maniere de distinguer les maxima des minima dans le calcul des variations.
- Michelson, A. A. & Morley, E. W. (1887): On the Relative Motion of the Earth and the Luminiferous Ether. American Journal of Science, 34 (203): 333-345.
- Brown, R. (1828): On the General Existence of Active Molecules. Philosophical Magazine, 4, 161-173.
- Planck, M. (1900): Zur Theorie des Gesetzes der Energieverteilung im Normalspectrum. Verhandlungen der Deutschen Physikalischen Gesellschaft 2, S. 237-245.
- Einstein, A. (1907): Über das Relativitätsprinzip und die aus demselben gezogenen Folgerungen. In: Jahrbuch der Radioaktivität und Elektronik, Band 4, S. 411-462. Leipzig: Hirzel.
- Millikan, R. A. (1913): On the Elementary Electrical Charge and the Avogadro Constant. In: Physical Review, Series II, Vol. 2, S. 109-143. Lancaster, PA: American Physical Society.
- Bothe, W., & Geiger, H. (1925). On the Nature of the Compton Effect; an Experimental Contribution to the Theory of Radiation. Zeitschrift für Physik, 32(1), 639-663.
- Gödel, K. (1931): On Formally Undecidable Propositions of Principia Mathematica and Related Systems I. Monatshefte für Mathematik und Physik, 38, 173-198.
- Cockcroft, J. D. & Walton, E. T. S. (1932): Experiments with High Velocity Positive Ions. II. The Disintegration of Elements by High Velocity Protons. In: Proceedings of the Royal Society of London. Series A, Vol. 137, No. 831, S. 229-242.
- Anderson, C. D. (1933). “The Positive Electron.” Physical Review, 43(6), 491-494.
- Wooley, S. (1951): Sound FX Library Record: Man getting eaten by alligator (Take 4). Warner Bros. Sound Department, Los Angeles.
- Kuhn, T. S. (1962): The Structure of Scientific Revolutions. University of Chicago Press.
- Hawking, S. W. (1975): Particle Creation by Black Holes. Communications in Mathematical Physics, 43, 199-220.
- Giger, H. R. (1977): Necronomicon. Sphinx-Verlag, Basel.
- Gilson, J. G. (1991): The Fine Structure Constant. In: Journal of Physical and Mathematical Sciences, Vol. 25, S. 1-20.
- Fölsing, A. (1993): Albert Einstein: Eine Biographie. Suhrkamp.
- Burgess, C. & Moore, G. (2006): The Standard Model: A Primer. Cambridge University Press
- Will, C. M. (2014): The Confrontation between General Relativity and Experiment. Living Reviews in Relativity, 17 (4).