SYMMETRY AND SYMMETRIES
FOUR SYMMETRIES

\[ \frac{1}{x} \rightarrow \text{INVERSE} \]
\[ \text{MIRROR} \]

\[ \text{THING GAP} \]
\[ \text{EXISTENCE ING} \]
\[ \text{NON-EXISTENCE ING} \]
\[ \text{TIME} \]
\[ \text{SOMETHING} \]
\[ \text{NOTHING} \]
\[ \text{CONTINUITY - DISCRETE} \]

\[ \text{DURATION INTERVAL} \]
\[ \text{AGG FRACTION INTERVAL} \]
\[ \text{EXTENSION GAP} \]

\[ \sqrt{M} \rightarrow S \]
\[ \frac{(S)^3}{(M)^2} \approx \frac{c^3}{G^2} \]

\[ S = \alpha^{-23} \mu^{-3} \]

\[ \text{Neg entropy is information order} \]

\[ \text{Inverse Time is Frequency} \]
\[ \text{Inverse Length is Curvature} \]
\[ \text{Inverse Velocity is Resistance} \]

\[ \text{anti time} = \sqrt{t} \]

\[ \text{REGRESSION} \]
\[ \text{OM MANI PADME HUM} \]
DERIVED FROM

\[ C = M^0L^1T^{-1}, \quad Z = 0 \]
\[ T = M^4L^2T^{-1}, \quad Z = 2 \]
\[ G = M^4L^3T^{-2}, \quad Z = 2 \]

**DIRAC**

\[
\begin{align*}
M & \sim \frac{s}{\alpha m} \\
L & \sim \alpha \, m_S \\
T & \sim \frac{\alpha m_S}{c^2} \\
G & \sim (\alpha m)^2 \, c^2
\end{align*}
\]

**EMMY NOETHER**

**SYMMETRY \leftrightarrow CONSERVATION LAW**
SYMMETRY AND ASYMMETRY

We must abandon the 2500 year old tradition extending from the time of Democritos that leads physicists to search for the fundamental elementary particles: We should accept instead the concept of fundamental symmetries, which is a concept of the philosophy of Plato Werner Heisenberg

Every law of physics, we think today, goes back in one way or another to some symmetry of nature
John A. Wheeler

Something must have asymmetry to be complex.
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There is a basic asymmetry between the elements connected by a feedback loop. One of the elements (e.g. prey) gives a surplus of energy, and the other (e.g. predator) uses a small part of such energy to maintain a more stable (internal) state.
ANON
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<tr>
<th>Title</th>
<th>Author</th>
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<td>SIX NOT-SO-EASY PIECES</td>
<td>Feynman, Richard P.</td>
<td>1963</td>
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<td>SYMMETRY ASPECTS OF M.C. ESCHER'S PERIODIC DRAWINGS</td>
<td>Caroline H. Macgillavry</td>
<td>1965</td>
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<td>MODULE PROPORTION SYMMETRY RHYTHM</td>
<td>Gyorgy Kepes (ed.)</td>
<td>1966</td>
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<td>ORDER IN THE UNIVERSE</td>
<td>Amstutz, Dr. G.C.; Kunz, F.L.; Charon, Jean E.</td>
<td>1967</td>
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<td>SHAPES, SPACE, AND SYMMETRY</td>
<td>Holden, Alan</td>
<td>1971</td>
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<td>SYMMETRY</td>
<td>Hermann Weyl</td>
<td>1980</td>
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<td>Heinz Pagels</td>
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<td>A. Zee</td>
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<td>CRYSTAL &amp; DRAGON</td>
<td>David Wade</td>
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<td>FEARFUL SYMMETRY</td>
<td>IAN STEWART, MARTIN GOLUBITSKY</td>
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<td>THE FORCE OF SYMMETRY</td>
<td>Vincent Icke</td>
<td>1995</td>
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<td>THE SEARCH FOR SUPERSTRINGS, SYMMETRY, AND THE THEORY OF</td>
<td>John Gribbin</td>
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<td>THE NEW AMBIDEXTROUS UNIVERSE (3RD EDITION REVISED)</td>
<td>MARTIN GARDNER</td>
<td>2005</td>
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<tr>
<td>THE EQUATION THAT COULDN'T BE SOLVED</td>
<td>MARIO LIVIO</td>
<td>2005</td>
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BOOKS ON SYMMETRY

CHAOS A VERY SHORT INTRODUCTION
LEONARD SMITH
2007
V=E-1

WHY BEAUTY IS TRUTH A HISTORY OF SYMMETRY
IAN STEWART
2007
V=E-1
ONTIDICH1.WP6
1995

ONTOLOGICAL DICHOTOMIES

There are two kinds of existence:
There is the Vairachona-Akshobya existence coming ex-nihilo from the Sunyata. This is sustained, serving all others, requiring no support. It is Sat.

There is derived existence, dependent on other, serving itself, requiring support.

There are two kinds of non-existence:
There is Dirac non-existence. When A and no-A are brought together the join results in zero, in nothingness.

There is Eddington non-existence. When there is AAAAAA..., uniform sameness, there is no awareness.

There is Pythagorean non-existence. One does not exist because it is a special case of Eddington non-existence.

Thus both 0 and 1 are symbols of non-existence

When self is joined with no-self, there is a Diracean union resulting in nothingness. When self is joined with not-self there is an Aristotelean union resulting in a plenum, i.e. in 1, which is according to Pythagoras also non-existent
Dirac: $A + \text{no-A} = 0$ e.g. matter and anti-matter
Aristotle: $A + \text{not-A} = 1$ for 1 read everything.

When + and - are joined in one world the result is 0, in the second world the result is energy release.

There are two kinds of truth:
There is sat truth, stand alone truth. It is just so.
There is contingent truth, truth that must be renewed or repeated to survive, else it is eroded by the second law. cf the Persian adage.

There are two realms:
The realm of space and time, a competitive zero-sum realm, the realm of struggle, work and learning.
The realm of spirit, of Love and beauty, giving, diffusing,
non-zero-sum world. the world of grace, support and refuge.
Humans inhabit both worlds.

There are two times:
Chrons
Kairos

On Symmetry
All symmetries are forms of Dirac separation, i.e. ex-nihilo.
Joining a symmetry --->0, cancels the symmetric parameter.
Joining clones ---> sumation.
Thus joining either cancels or totals,
Separation either creates a symmetry (Dirac ex-nihilo) or truncates.

The world is made of symmetries and clones, unlikes and likes,
Mitosis is horizontal separation resulting in clones
Dirac separation results in 2 bodies that are in some aspect symmetric.

Does the pain in separation result from separating likes or unlikes?

We are all a blend of like and unlike, clones and symmetries.
In separation, I still have the like with me, it is the unlike (the symmetric) whose removal in separation causes pain.
MORE ON EDDINGTON AND WHITEHEAD

THREE ONTOLOGICAL AXIOMS:

Pythagoras speaks of the necessity for there to be more than one in order for there to be existence.

Whitehead speaks of the necessity for recurrence in order for there to be recognition and perception.

Eddington speaks of the necessity for difference, for non-sameness in order for there to be detection and perception.

Building on Pythagoras:

For Pythagoras the cardinal number one did not exist. Only when cardinal number two came along did one and two both come into existence. (It is easier to see that ordinal number one could not exist by itself.) Similarly the notion of universe, meaning one totality, is meaningless. There can be no one universe, it is a misleading concept. There can, however, be many universes, but this negates the 'uni' in universe. Totality of everything cannot exist until it in some way divides itself into (at least) two parts, where there is both an element of similarity and an element of difference in the parts. i.e. there is some form of symmetry. For the concept of symmetry implies the existence of both a difference and a sameness in the parts. Thus symmetry is seen to be a foundation stone of existence.

The notion of 'degrees' of existence can be introduced as a measure of the number of symmetries that exist. Whenever two 'opposite' parts possessing a symmetry come together in such a way as to effect oneness by obliterating the symmetry, the lose one of their degrees of existence.

These pythagorean concepts are implicit in the creation story given in Genesis 1. The void, the nothingness, the emptiness, the sunyata does not exist. The separation of the emptiness into light and dark, into firmament and waters, ... brought the world into existence. Light and dark, firmament and waters, possess symmetry. But there are also 'meta-symmetries' the symmetry between void and existence, and the symmetry between Creator and creation, that underlie all else. These meta-symmetries are symbolized in the Tibetan Book of the Dead by the symmetric Tathagatas, Vairachona and Akshobya who also demonstrate the necessity of self-reference for all existence.

We can only surmise that 'in the beginning' the nothingness or void resolved itself into four: Into the dyad of void and existence and into the dyad of Creator and creation. But the void was there both before and after creation. It is the symmetrical component to all existence which sustains and preserves existence. On the other hand, Creator and creation both are sub-components of existence. The Creator, God, came into existence only when creation came into existence. But the void remains, it is outside time. It is the external to all creators and creation from which innovation and change arises. Only from the void can come the new symmetries leading to further creators and creation, to new theophanies and metanoias, to new heavens and new earths.

Building on Whitehead:

Whitehead develops the similarity part of Pythagoras' ontological dyad.
THE BASIC DESIGN INGREDIENTS OF THE COSMOS.

There is an interesting parallel between the discovery of the various kinds of numbers and the increase of human understanding both of the physical world of determinism and of the moral world of choice. This parallelism is not only an affirmation of the role of mathematics as a valid and extensive symbolism for the nature of the world, but also that mathematics can serve as a useful guide on a spiritual path. But Pythagoras understood this many centuries ago and organized communities dedicated to the mathematical path to knowledge and spiritual growth. Over time the fullness of the power of mathematics was ignored, as the doctrines of competing religious institutions prevailed over the philosophy of Pythagoras, relegating mathematics to a purely secular role. But in the present century the extensive implications of the role of mathematics in such realms as aesthetics and ethics are liberating it from its long confinement solely to matters of quantity. It is timely to reopen the qualitative aspects of number, not in the sense of the pseudo science of numerology, but in the sense of seeking deeper interpretations for what the numbers found in nature have to tell us. The grammar of mathematics, after all, underlies the grammars of music and art as well as of physics and biology. It is our best symbolism for representing the cosmos.

This approach to cosmic structure is based on levels of numerical symmetry.

Arithmetic Symmetry

In the first Pythagorean level, the structure’s essence is symmetry and balance. The numbers involved are the positive and negative integers. The null or fulcrum of the first level is symbolized by the quantity zero. \([-x \_ 0 \_ +x]\) The conservation laws of physics such as conservation of charge, angular momentum, or energy all derive from some basic symmetry. [The relation between symmetry and conservation was pioneered by Emmy Noether]. Symmetry-balance appears in modern game theory in the, “tit for tat” strategy. In the fields of morality and ethics symmetry-balance takes the forms of justice, level playing field, middle way (Madyamika). Many religions have this first level ingredient in their teachings, as for example, in orthodox Judaism, the teaching, “an eye for an eye, a tooth for a tooth”. The logic of this level is Aristotelean two value logic based on the law of the excluded middle. The operation involved is negation. This level is cyclic (repetitive) and reversible.

Geometric Symmetry

The second Pythagorean level is based on reciprocity or inversion. The numbers involved are the rational numbers. The null is symbolized by the quantity one. \([x^{-1} \_ 1 \_ x^1]\) Inversion in the unit circle or unit sphere maps the exterior in a one to one manner onto the interior (and vice versa).
SYMQUOTES3.WPD  
April 14, 2010

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ANON

\[ \text{\textbf{L. M. NOETHER}} \]

\[ \text{\textbf{SYMMETRY \& CONSERVATION}} \]

\[ \text{\textbf{MUTUALITY \& SYMMETRY}} \]

\[ \text{\textbf{GEOMETRIC MEANS \& SYMMETRY}} \]
TIME TABLE: \( T = T( G, M, L, h, c) \)

\[ [T] = 1 \]

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<td>( G M^3 L / h c^2 )</td>
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\( \sqrt{ } \) is for entire expression.
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$$[T] = 1$$

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<td>(\sqrt{GMLc^4})</td>
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<td>(\sqrt{Lh/Mc^3})</td>
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TIME TABLE: \( T = T(G, M, L, h, c) \)

\[ [T] = 1 \]

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Notation: In the above table \( h \) is used for \( h \), the Planck constant / \( 2\pi \).  
\( \sqrt{\cdot} \) is for entire expression
**TIME TABLE:** $T = T(\ G, M, L, h, c)$


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$T \sim 3.761 \text{ My}$  \quad (x10^3)$

$\zeta \sim 9.047 \text{ By} \times 3/2 = 13.57 \text{ By}$  \quad (x10^9)$

$\gamma \sim 444 \text{ By}$  \quad (10^7)$
**TIME TABLE:** \( T = T(G, M, L, h, c) \)

\[ [T] = 1 \]

\[
\frac{L}{c} \quad \text{w. Table}
\]

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\(ML = \frac{L^2}{c^2}, m_0 = m_0^2\)
FORCE TABLE: $F=F(G,M,L,h,e)$

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May 17, 2010

FORCE VALUES

\[ \dot{\lambda} = 0 \] FORCES

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\( \alpha \mu \), \( \alpha \mu^2 \), \( \alpha \mu^3 \)
May 17, 2010

FORCE VALUES

\[ G = 0 \] FORCES

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\( \Delta (am) \) = \( (am)^{-5} \)
\( \Delta (am)^{-1} \) = \( (am)^{-3} \)
\( \Delta (am)^{-2} \) = \( (am)^{-3} \)
\( \Delta (am)^{-3} \) = \( (am)^{-3} \)
\( \Delta (am)^{-4} \) = \( (am)^{-3} \)

\( \alpha_m \) = 0

\( S \) = \( S^2 \) = \( S^3 \)
FORCE VALUES

M, L | FORCE | BARYON | PLANCK | DARK | STELLAR | UNIVERSE

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Δ 37.101 323  Δ = 0  77.583 872  155.167 742  232.751 612

\frac{S}{(αμ)^4} \uparrow \quad \frac{S}{(αμ)^2} \uparrow \quad \frac{S}{(αμ)^3} \uparrow

Δ B - L  Δ C - D, P, R, U
S(αμ)^4  S(αμ)^0
S(αμ)^3  S(αμ)^{-1}
S(αμ)^2  S(αμ)^{-2}
S(αμ)  S(αμ)^{-3}
S^{-7}(αμ)  S^{-7}(αμ)^{-4}

Δ B - L  Δ C - D, P, R, U
S(αμ)^4  S(αμ)^0
S(αμ)^3  S(αμ)^{-1}
S(αμ)^2  S(αμ)^{-2}
S(αμ)  S(αμ)^{-3}
S^{-7}(αμ)  S^{-7}(αμ)^{-4}

Δ B - L  Δ C - D, P, R, U
S(αμ)^4  S(αμ)^0
S(αμ)^3  S(αμ)^{-1}
S(αμ)^2  S(αμ)^{-2}
S(αμ)  S(αμ)^{-3}
S^{-7}(αμ)  S^{-7}(αμ)^{-4}

79.838 018 = S^2(αμ)  275.071 748
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May 17, 2010

FORCE VALUES

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May 17, 2010

FORCE VALUES

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$\Delta P-E$

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$S^2$

$(\lambda)^-S$

$S^3$
FORCE TABLE: \( F = F(G, M, L, h, c) \)

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Note: \( \frac{M^2 L^2}{m_o L^2} \) for gravitational force, \( \frac{G M^2}{L^2} \) for gravitational force, \( \frac{G M^3}{L^2} \) for gravitational force, \( \frac{G M^4}{L^3} \) for gravitational force, \( \frac{G M^5}{L^4} \) for gravitational force, \( \frac{G M^6}{L^5} \) for gravitational force.
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$L_\pi$</td>
</tr>
</tbody>
</table>
### Force Values

#### COMMON

<table>
<thead>
<tr>
<th>( M, L ) Force</th>
<th>Force ( \tilde{M} )</th>
<th>( \tilde{D} )</th>
<th>( \tilde{N} )</th>
<th>( \tilde{U} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>( \frac{h^2}{ML^3} )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-\frac{1}{2}, \frac{3}{2})</td>
<td>49,032</td>
<td>49,082,678</td>
<td>49,082,678</td>
<td></td>
</tr>
<tr>
<td>(-2, +1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-\frac{7}{2}, +\frac{1}{2})</td>
<td>52,163,796</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\frac{5}{2}, \frac{5}{2})</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\frac{1}{2}, \frac{1}{2})</td>
<td>44,574</td>
<td>44,574</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\frac{3}{2}, \frac{3}{2})</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Notes

- \( \frac{M^2}{L} \) comes to \( k=0 \)
- \( \frac{G^2}{L} \) comes to \( k=0 \)
- \( \frac{1}{h^2} \) comes to \( g=0 \)
- \( \frac{1}{ML^2} \) comes to \( g=0 \)
\[ \frac{L}{c} = 3.999841 \text{ in km}^2 \]

For cos circum
\[
\frac{U}{U_e} = \frac{55.864956}{52.680194} = \frac{135.52074}{135.52074} = \frac{43.268162}{175.790236} = \frac{177.099420}{1.616} = 8.92 (\mu M)^3
\]

\[
\frac{U_V}{U_e} = \frac{135.52074}{135.52074} = \frac{118.86417}{5} = \frac{14.074436}{12.147038} = (\mu M)^3
\]
Fraisse, Yves Goussault, Pierre Kende, J. W. Lapierre, Michel Panoff, Henri Pequignot, Jean Marie Domenach, and Paul Thibaud. A third version served me and my deceased friend Greer Taylor as the basis for our participation in the Canadian Conference on the Law in January 1972 in Ottawa. Comments by David Weisstub, Nils Christie, Allen M. Linden, J. G. Castel, H. w. Arthurs, José Antonio Viera-Gallo, J. C. Smith, and Bonaventura de Sousa Santos, and other critical papers by jurists, will be published in mid-1973 in Toronto. During the summer of 1972, participants in my CIDOC seminar contributed very helpful papers. I'm especially grateful for the assistance of John Bradley, John Brewer, José Maria and Veronica Bulnes, Martin Cohen, Irene Curbelo de Diaz, Dennis Detzel, Joseph Fitzpatrick, Amnon Goldworth, Conrad Johnson, Hartmut von Hentig, John MacKnight, Michael Macoby, Leslie Marcus, Francisco Miró Quesada, Marie-Noëlle Monteil, William Ophuls, Marta H. Reed, Everett Reimer, Francisco Varela, Etienne Verne, Jacques Vidal and German Zabala. Dennis Sullivan has patiently and critically assisted me in editing the final version. After I had delivered this manuscript to the publisher, I received valuable suggestions from J.P. Naik and his friends in India. These have seeped into the text to the extent this can happen in the correction of proofs. Second only to Valentina Borremans and Greer Taylor, Heinz von Foerster, Erich Fromm, Hermann Schwember and Abraham Diaz Gonzales have exerted the most decisive influence on the formulation of my ideas.

Introduction
ASYMMETRIES

AND

BROKEN

SYM METRIES
THE ESCALATION OF ASYMMETRIES
MATTER ↑ | ANTIMATTER ↓
DRK MATTER | BARYONIC MATTER
INNOVATION: MICROSOFT

POPPER'S VERIFICATION | FALSIFICATION
PROCESS ASYMMETRY → PRODUCT ASYMMETRY

ECONOMICS: RICH ↑ | POOR ↓

CONTINUOUS | DISCRETE

ASYMMETRY AS SOURCE OF DYNAMICS, CHANGE
ASYMMETRIC DIALECTICS [PROCESS, STATE]
QUESTIONS | ANSWERS

DEPARTURE | RETURN
ISOLATION | SOCIALIZING
BEING | DOING
Why is there something instead of nothing? That is a child's question, but it also haunts the imaginations of physicists and mathematicians. What they know is that the matter and antimatter created in the Big Bang should have canceled each other out, leaving nothing instead of the something we call the universe. Why that didn't happen may have been partially revealed in a recent experiment in the Tevatron — a particle accelerator — at Fermilab, in Batavia, Ill.

We proceed gingerly when interpreting the results of high-energy physics experiments. The way it has been explained is that it all comes down to a very slight bias, an asymmetry, in the behavior of a subatomic particle, the neutral B-meson. As it oscillates between its matter and antimatter states, it shows a slight predilection for matter, a result predicted by Andrei Sakharov.

That preference for one state over another — becoming matter more readily than it becomes antimatter — is small, about 1 percent. But that may be enough to explain the preponderance of matter. We expect more news on this front from the Tevatron and its larger European cousin, the Large Hadron Collider.

What these physicists are searching for is a model of the universe and its origins. We are, as we know, made of stardust, of elements formed in the Big Bang and in the subsequent creation and destruction of stars. The very existence of this universal stuff called matter may depend on a slight bias in the frenetic variation of a particle we can only momentarily detect, in the hottest kilns humanity has so far created.

The escalation of asymmetry: \[ \text{MATTER} \uparrow | \text{ANTIMATTER} \downarrow \] (also in economics and finance)
INVERSIONS

AND

SYMMETRIES
Recently several important research physicists have said that to better understand the world our traditions focus on finding new particles and sub-particles should be replaced with a search for new symmetries.

We know symmetries are important constituents of all structures and patterns. Many symmetries are obvious, as for example, those in a suspension bridge. But the majority of symmetries in physical, bio, social and other systems are not manifest until basic internal and contextual relations are explored. (Indeed, internal-contextual itself is the root of many fundamental symmetries.)

\[^1\] This is a special anniversary. From 1934 to 2011 is seventy seven years. Include the 23 of May 23 and we have \(77 + 23 = 100\).
Do, If Symmetry is to be the new paradigm
What is symmetry?

Quote: "Let us take the example of an ancient

The Ancient

Apollo, Divinity

Plato, Protagoras

Greek, Parmenides

Symmetry is Opposite?

Must have a Fulerum?

Symmetry = DURADS, ORLECTICS

What is Anti-symmetry

Fulesums

Past Present Future

TILINGS

MUSIC: PITCH-RHYTHM

Examples to characterize

Diverse HOMOGENEZE

Convex CONCAVE

Discrete CONTIGUOUS

Give Receive

RIGHT LEFT

UP DOWN

Me to RANGE DIRECTION

US THEM

ALIKE DIFFERENT [if all same → none existenced]
\[ \frac{ML}{T^2} \quad \frac{wML^2}{T^2} \quad \frac{M}{LT^2} \quad \frac{M}{L^3T^2} \quad \frac{ML}{L^2T^2} \]

\[ \frac{xL^2/L^2}{vL/L} \]

\[ \frac{E}{V} \quad \frac{F}{A} \quad \text{PRESSURE} \]
SEARCH FOR SYMMETRIES

What is the unit used for atomic weights? $H = 1.01$

\[ \frac{\hat{E}}{G} = -9.324 \times 10^{-6} \Rightarrow J = m_0 \]

\[ m_0 (\frac{s}{\alpha N})^0 = \frac{\hat{E}}{G} = m_0 \]

\[ m_0 (\frac{s}{\alpha N})^{-1} = \frac{\hat{E}}{G} = m_0 \]

\[ m_0 (\frac{s}{\alpha N})^{-2} = \frac{\hat{E}}{G} = m_0 \]

Number of protons in U = $\frac{m_e}{m_p} = \frac{526.80}{13.776} = 76.486 \pm 76 = 12$ (uu)

Space / size / proton $L_p = 27.95$, $V_{p} = -12.350$

3 DIM SPACE (uus)

| 121.497638 | 784 (1/1812) | 44.990042 |

2 DIM SPACE (uus)$^2$

| 80.365042 | 76.426746 | $\frac{(s_1)}{m_0}$ | 1.127 |

1 DIM SPACE (uus)

| 80.482 458 | 40.482 456 | (uus) | 3.5 \times 971 250 |

0 DIM

| $s^2$ | 1.127 |

The interesting value now is \( \frac{1}{\text{dim}} \)

- all protons are left - with only a few space left over

- i.e. Cosmic MASS-SPACE in 2 dim space

- e.g. surface of spheres

\[ \text{empty dim} \times \frac{1.127}{121.448} = 0.009 279 692 \text{ empty} \]

\[ 1090 \text{ nur by 1.0215} \]

\[ \log 101 \ 1.0092 \]
Assume the strong force \( \frac{G^3 L^2}{C^7} \) which is \( \left( \frac{G}{c^2} \right)^2 \frac{L^2}{G^2 H^2} \) \( \Sigma \Gamma = F^2 \) Plank

\[ E = \text{Electric force } \uparrow = \frac{hc}{L^2} \] \( \Sigma E = \frac{G^3 L^2}{C^7} \) \( M^2 = L^4 \) \( M \propto L^2 \)

\( \log_{10}(G) \left( \frac{G^3 L^2}{C^7} \right) = -121.840555708 \) \( \frac{G^3 L^2}{C^7} \left( \frac{E}{c^2} \right)^2 = \frac{\hbar^2}{(C^2)} \) \( \frac{G^3 L^2}{C^7} \left( \frac{E}{c^2} \right)^2 \begin{bmatrix} E_0 = -28.128987025 \\ E_0 = -51.237874050 \end{bmatrix} \)

Find \( L \) for proton mass \( m_p = -23.776602304 \)

\( \frac{G^3 L^2}{C^7} \) \( m_p^2 = -169.893760316 = L_p^2 \)

\( L_p = -42.348440079 \) \( \frac{L_p^2}{m_p^2} = -84.674880158 \)

\( \frac{V_0 l_0}{L_p^2} = 3.935547115 = \xi \) \( \frac{L_p}{L_0} = \frac{L_p}{L_0} \) \( \xi = 72.146811944 \)  

\( \frac{V_0}{S} \) \( \frac{L_p^2}{L_0} \) \( \frac{G m_p}{C^2} = -51.905539 = a \)

\( \Sigma = \left( \frac{G}{c^2} \right)^2 l_0^2 M^2 = L^4 \)

\( \Sigma \frac{L_p^2}{L_0} = \frac{G}{c^2} l_0 M = L^2 \) \( -60.920277854 M = L^2 \)

\( M \propto L^2 \)

\( m_p \sim -42.348440079 \) \( m_0 \sim -65.582681652 \) \( \Delta = -23.234241573 \)

\( M_0 \sim -46.466482482 \) \( M_0 \sim -8.240084 \) \( \Delta = 4.120042 = M_0 m_p \)

\( L_p^2 = 4.47L_0^2 \) \( L_0^2 = 4.47L_p^2 \)

\( m_n \) \( m_e \)  

\( \frac{L_p^2}{L_0^2} = 4.470042 \) \( \frac{L_0^2}{L_p^2} \) \( \frac{L_0^2}{L_p^2} = \left( \frac{L_0}{L_p} \right)^2 \) \( \frac{m_n}{m_e} \) \( \frac{L_0^2}{L_p^2} = \left( \frac{m_n}{m_e} \right)^{3/2} \)
COSMIC MASSES

\[ \delta = 1.19463740625 \]
\[ 16 \delta = 19.114198500 \]

<table>
<thead>
<tr>
<th>Universe</th>
<th>52.680191696</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meta Cluster</td>
<td>51.48555428975</td>
</tr>
<tr>
<td>Galaxy Cluster</td>
<td>50.2909168835</td>
</tr>
<tr>
<td>Blue Galaxy</td>
<td>47.901642071</td>
</tr>
<tr>
<td>Red Galaxy</td>
<td>43.123092446</td>
</tr>
<tr>
<td>Star Cluster</td>
<td>38.344542821</td>
</tr>
<tr>
<td>Star</td>
<td>33.565993196</td>
</tr>
<tr>
<td>Planet</td>
<td>24.008893946</td>
</tr>
<tr>
<td>Dark</td>
<td>14.451794696</td>
</tr>
<tr>
<td>Planck</td>
<td>-4.662403804</td>
</tr>
<tr>
<td>Baryon</td>
<td>-23.776602304</td>
</tr>
</tbody>
</table>

\[ \text{Down } 1 \delta \]
\[ \text{Down } 2 \delta \]
\[ \text{Down } 4 \delta \]

| Star            | 33.565993196 |
| Star            | 32.371355789 |
| Star            | 31.176718383 |
| Star            | 29.982080977 |
| Star            | 28.787443571 |
| Star            | 27.592806164 |
| Star            | 26.398168758 |
| Star            | 25.203531352 |
| Planet          | 24.008893946 |
FORCE ARRAY: \( F = F(M, L, G, h, c) \)

<table>
<thead>
<tr>
<th>( h )</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
<th>-1</th>
<th>-2</th>
<th>-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>-5</td>
<td>( L^3c^{10}/G^4M^3 )</td>
<td>( Lc^7h/G^3M^3 )</td>
<td>( c^4h^2/G^2M^3L )</td>
<td>( c^3h^3/GM^3L^3 )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-4</td>
<td>( L^2c^8/G^3M^2 )</td>
<td>( c^5h/G^2M^2 )</td>
<td>( c^2h^2/GM^2L^2 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-3</td>
<td>( L^3c^9/G^3Mh )</td>
<td>( Lc^6/G^2M )</td>
<td>( c^{7/2}h^{1/2}/G^{3/2}L^{1/2} )</td>
<td>( c^3h/GML )</td>
<td>( h^2/ML^3 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2</td>
<td>( L^2c^7/G^2h )</td>
<td>( c^4/G )</td>
<td>( ch/L^2 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>( ML^3c^8/G^2h^2 )</td>
<td>( MLc^5/Gh )</td>
<td>( Mc^2/L )</td>
<td>( GMh/L^3c )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>( M^2L^2c^6/Gh^2 )</td>
<td>( M^2c^3/h )</td>
<td>( GM^2/L^2 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>( M^2L^3c^7/Gh^3 )</td>
<td>( M^3Lc^4/h^2 )</td>
<td>( GM^3c/Lh )</td>
<td>( G^2M^3/L^3c^2 )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>( M^4L^2c^5/h^3 )</td>
<td>( GM^4c^2/h^2 )</td>
<td>( G^2M^4/L^2c )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>( M^5L^3c^6/h^4 )</td>
<td>( GM^5Lc^3/h^3 )</td>
<td>( G^2M^5/Lh^2 )</td>
<td>( G^3M^5/L^3c^3h )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
\[ \text{FORCE} \quad C \frac{1}{2} \sqrt{\frac{1}{M} \frac{K}{M}} = K = 44,420 \, 174 \, 627 \]

\( M_p = a \begin{pmatrix} 1 \end{pmatrix} \)

\( M_0 = E = -23,776 \, 092 \, 304 \)

\( M_o = \psi = -4,662 \, 403 \, 798 \)

\( M_o = D = +14,451 \, 794 \, 566 \)

\( M_o = K = 433, \, 585 \, 993 \, 196 \)

\( M_o = V = +52,680 \, 191 \, 696 \)

\( M_o = K = 44,420 \, 174 \, 627 \)

\( M > 1 \) exponents

\[ \Delta = 9,557 \, 099 \, 250 \]

\[ \Delta = \left( \frac{5}{\lambda \mu} \right)^{\frac{1}{4}} \]
TIME

\[ E \cdot \text{TIME} > h \]

\[ h = \frac{E}{c} \]

\[ h^2 = \frac{E^2}{c^2} > 53,953,649,860 \]

\[ E > \frac{c^2}{L} \]

\[ \frac{Gm^2}{c^2} > h \]

\[ M > \frac{\sqrt{m_0}}{c} \]

\[ m_0 = 4.672,740,398 \]

\[ m_L > \frac{L}{c^2} \]

\[ L = \frac{c}{m_L} \]

\[ \psi = \frac{GmL}{c^4} \]

\[ T = \frac{c^2}{m_L} / \psi \]

\[ m_p = 23.776 \text{ GeV} \]

\[ m_p = 23.776 \text{ GeV} \]

\[ m_p = 8.832 \text{ GeV} \]

\[ m_p = 52.7 \text{ GeV} \]

\[ m_p = 46.778 \text{ GeV} \]

\[ m_p = 58.3 \text{ GeV} \]

\[ m_p = 12.5 \text{ GeV} \]

\[ m_p = 3.1 \text{ GeV} \]

\[ m_p = 0.8 \text{ GeV} \]

\[ m_p = 0.4 \text{ GeV} \]

\[ m_p = 0.2 \text{ GeV} \]

\[ m_p = 0.1 \text{ GeV} \]

Proton passes 2 tests; more stuck.

Electron 1 test.

\[ H = 23.776 \text{ GeV} \]

\[ \bar{H} = 33.3 \text{ GeV} \]

\[ \frac{H}{\bar{H}} = 2 \]

\[ \text{What time} \Rightarrow \frac{c}{L} > \frac{Gm^2}{c^4} \]

\[ \text{Time} = \sqrt{Gm^2 \frac{h}{L^2 c^9}} \]

\[ c^2m - \frac{L}{E} > \frac{Gm^2}{c^4} \]

\[ \frac{Gm^2}{c^2} > h \]

\[ M > \frac{L}{c^2} \]

\[ M^2 > \frac{h}{c} = 7,175,295,619 \]

\[ L = 43,321 \text{ GeV} \]

\[ L = 43,321 \text{ GeV} \]

\[ L = 93,976,923,930 \]

\[ L = 23,466,533,217 \]

\[ L = 23,466,533,217 \]

\[ L = 23,466,533,217 \]

\[ L = 23,466,533,217 \]
The August 12th lecture of the physicist, Ransom Stephens, served to update many of our anachronistic world views. While the ancients held the world to consist of three domains, known as Heaven (abode of gods), Earth (abode of mortals), and Hell (abode of daemons); physicists now know that the three domains are properly designated: the Micro (abode of particle physicists), the Meso (abode of geophysicists), and the Macro (abode of astrophysicists). The particle physicists have created a STANDARD MODEL which allows them to explain not only everything in their own level but also what exists in the upper levels. [This is called reductionism]. However, as with ancient theologians, there is one name never to be spoken aloud. In the case of particle physicists: this name is GRAVITY.
HEISENBERG
UNCERTAINTY PRINCIPLE

\[ E \cdot T > \hbar \]
\[ \Rightarrow \text{stability} \quad \beta = \text{fission} \quad M = m_0 \]

\[ M^2 \cdot T > -26.976 \cdot 923.930 \]
If \( M = m_0 \):
\[ T = T_0 = -43.268 \cdot 161.532 \]
\[ -4.662 \cdot 403.798 \]
\[ 20.953 \cdot 641.406 \]
\[ 16.291 \cdot 237.608 \]
\[ -58.268 \cdot 161.532 \]
\[ -2.976 \cdot 923.924 \text{ not } \hbar \text{ but } \hbar \]
If \( M = m_0 \), \( E \cdot T = \hbar \)

Object with Mass < \( m_0 \)

\[ m_p: \quad \hbar \cdot T = G m_p \frac{m_e}{c^3} \]
\[ \frac{G \cdot M^2}{\hbar} \sim \hbar \]
\[ M^2 \cdot \frac{c^2}{\hbar} \approx m_0 \]

What about other choices of Time as 25
\[ \frac{T}{T_0} = 25 \]
\[ M^2 \cdot \frac{c^2}{\hbar} = M \cdot \hbar \cdot T \]
\[ \frac{12.075 \text{ day}}{1.0476 \cdot 8.21} \]
\[ 7.926 \cdot 733 = \text{ch} \]
\[ -26.976 \cdot 924 \]
\[ -34.903 \cdot 657 \]

\[ \frac{M L^2}{T} > \hbar \text{ stable} \]
\[ \beta = \sqrt{\frac{L^3}{GM}} \]
\[ M \cdot \left[ \frac{\hbar}{\sqrt{GM}} \right] > \hbar \]
\[ C^2 \cdot L \cdot M^2 \cdot \frac{\hbar}{G} > \hbar \]
\[ C^2 \cdot L \cdot M^2 \cdot \frac{\hbar}{G} > \hbar \]

\[ G m^2 \frac{M}{c^3} > \frac{\hbar^2}{c} \]
\[ \beta = -59.953 \cdot 848 \]
\[ \beta = -49.082 \cdot 578 \]
\[ -103.036 \cdot 426 \]

\[ \frac{G M^2}{c^3} \]
\[ \frac{G m^2}{c^3} \]
\[ \beta = -26.976 \cdot 923.930 \]
\[ -26.976 \cdot 923.930 \]
\[ 9.324 \cdot 927 \cdot 608 \]
\[ 4.62 \cdot 403.901 \]

1.0: \( M = m_0 \)

\[ M > m_0 > \hbar \]

whence \( T > \beta \)

\[ h = 61 \cdot 26 \cdot 06 \]
\[ S(h^2) = 103 \]
The August 12th lecture by physicist, Ransom Stephens, served to update many of our anachronistic world views. While the ancients held the world to consist of three domains, known as Heaven (abode of gods), Earth (abode of mortals), and Hell (abode of daemons); physicists now know that the three domains are properly designated: the Micro (abode of particle physicists), the Meso (abode of geophysicists), and the Macro (abode of astrophysicists).

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Further updating informed us that the apocalyptic number is no longer 666, but has become 137. In fact, a power series based on the reciprocal of this number, (the fine structure constant), converges to the number, +3. (This result gives confirmation to the basic structures of both theology and physics).

Lastly, the most revolutionary update involved the overthrow of both Aristotle’s law of the excluded middle and Popper’s principle of falsification: Heisenberg’s Uncertainty Principle has rendered all measurements “murky”. No hypothesis or concept is any longer true or false. Propositions can now only possess a less than one probability of being valid. This has resulted in a new approach to what we have been calling reality, and to a new definition of the dichotomy: real-vs-virtual.

For further details: read Ransom Stephens’ THE GOD PATENT
The Second Law of Thermodynamics operates in two modes:

Mode I:
The Homogenization Mode.

Homogenization forces are those that tend to bring the range of values of a parameter to a single value. Gravity attempts to bring the positions of masses to a single point. The second law of thermodynamics attempts to bring temperature throughout the system to one value. Further, when a parameter contains only one value, then it ceases to be a parameter. Thus if homogenization succeeds in reducing all values to the same value it then effects the elimination of a parameter. If all parameters are eliminated, that is total sameness prevails, then extinctions results. Ultimate homogenization is the equivalent of non-existence, a principle recognized by both Pythagoras in saying that ONE does not exist, and by Eddington in saying that uniform sameness is the philosophical equivalent of non-existence.

Mode II:
The Fragmentation Mode:

Fragmentation forces are those that lead to decay and the destruction of complexity and order. The second law of thermodynamics holds that entropy or disorder must in the large always increase. Fragmentation (expansion in B-SPACE), scattering (expansion in P-SPACE), diversification (expansion in H-SPACE) all represent an increase in disorder. Diversification effects an increase in disorder through the increase in difficulty of communication as elements become more diverse, thus inhibiting the emergence of complexity.

It seems paradoxical that the destruction of order is achieved both through homogenization and through diversification. It is counter intuitive to think of uniformity as disorder. However, the second law in stating increase of entropy is simultaneously stating decrease of information. and the amount of information implicit in a uniform ordering may be less that in a more diverse ordering. On the other hand as diversification appears to involve more information, what is the second law up to? In this case the second law is operating in an inhibitory mode by reducing the likelihood of the building of complexity which would be a definite increase in information.

The ultimate definition of homogenization is the destruction of uniqueness. Thus both the increase of order and the increase of disorder can result in loss of uniqueness. We may think of there being Yin homogenization, scattering to one condition and Yang homogenization, focusing or gathering to one condition. Gravity is a Yang homogenization, decay is a Yin homogenization.
\[ S = \Delta \mu m_D^2 \]

\[ M_K = M_0 \Delta^k = m_P \Delta^{k+1} \]

\[ M_K = M_{K-p} \Delta^3 \]

\[ \frac{m_0}{m_P} = \Delta = 19.114195 = \sqrt{\frac{S}{\Delta m_K}} = \frac{\Delta}{\Delta m_K} \]

\[ \Delta^2 = 38.223896 \]

\[ \Delta^3 = 57.342594 \]

\[ \Delta^4 = 76.456742 \]

\[ \Delta^5 = 95.570990 \]

<table>
<thead>
<tr>
<th>( k = 2 )</th>
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<th>( k = -2 )</th>
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<tr>
<td>( M_0 )</td>
<td>( M_0 )</td>
<td>( M_0 )</td>
<td>( M_0 )</td>
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<tr>
<td>( \Delta^2 = 38.223896 )</td>
<td>( \Delta^3 = 57.342594 )</td>
<td>( \Delta^4 = 76.456742 )</td>
<td>( \Delta^5 = 95.570990 )</td>
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</table>

\[ \frac{M_0}{m_P} = \frac{m_D^2}{\Delta^3} = 0.464540 = m_P \Delta^2 \]

\[ M_D = m_P \Delta^2 \]
### The "Triangle Force"

<table>
<thead>
<tr>
<th>$\frac{M}{L}c^2$</th>
<th>$\frac{M}{L}c^2$</th>
<th>$\frac{M^2}{ML^3}$</th>
<th>$\frac{M^2}{ML^3}$</th>
<th>$\frac{GM^3}{L^2}$</th>
<th>$\frac{G^4}{L^2}$</th>
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<td>$ML = \frac{h}{c}$</td>
<td>$ML = \frac{h}{c}$</td>
<td>$ML = \frac{h}{c}$</td>
<td>$ML = \frac{h}{c}$</td>
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</tr>
</tbody>
</table>

### Treatment of \( L \)

\[
\begin{cases}
ML = \frac{h}{c} \\
\frac{M}{L} = \frac{c^2}{G}
\end{cases}
\Rightarrow \begin{cases}
M = M_0 \\
L = L_0
\end{cases}
\]

**All forces \( \Rightarrow ML = \frac{h}{c} \)**

\[
\text{equal to} \quad or \quad ML = \frac{h}{c}
\]

\[
\text{or} \quad \frac{M}{L} = \frac{c^2}{G}
\]

\[
4 \text{ denoucent}
\]

**or** \( M = M_0 \)

**or** \( L = L_0 \)

**or** their fold

\[
M^2 = M_1 \cdot M_2 \\
L^2 = L_1 \cdot L_2
\]

\[
M^3 = M_1 \cdot M_2 \cdot M_3 \\
M^4 = M_1 \cdot M_2 \cdot M_3 \cdot M_4 \ldots
\]

\[\Theta \bigoplus \bigotimes \bigcirc \Leftrightarrow L = \frac{h^3}{G} = -47 \]

\[\Leftrightarrow -47\]

\[
\frac{M^4 \cdot L^3}{h^3} = m_0 \cdot \frac{h^3}{c^2} \\
\frac{ML \cdot c}{h} = \frac{3 \sqrt{m_0}}{h}
\]
**FORCE TABLE: F = F(G,M,L,h,c)**

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<tr>
<th>ML</th>
<th>-1</th>
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<th>0</th>
<th>+0.5</th>
<th>+1</th>
<th>+1.5</th>
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</table>

\[ F = \frac{C^4}{G} \]

Plank: If \( P = \frac{C^n}{G} \)

Gravity: \( N = \frac{GM^2}{L^2} \)

Schwarzschild: \( R = \frac{GM}{C^2} \)

\[ P = \frac{R}{N} \]

\[ E = \frac{C^4 l_0^2}{G} \]

\[ R^2 E = \frac{C^4 l_0^2}{G} \]

\[ N = \frac{C^4 l_0^2}{R^2} \]

\[ E = \frac{C^4 l_0^2}{G} \]
FORCE TABLE: \( F = F(G, M, L, h, c) \)

<table>
<thead>
<tr>
<th>( M/L )</th>
<th>(-1)</th>
<th>(-0.5)</th>
<th>(0)</th>
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<th>(+1)</th>
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<tr>
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<td></td>
<td>( \frac{L^2 C^3}{M^3 G^2} )</td>
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<tr>
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<td>( \frac{1}{M^2} \frac{h^4 G}{G^2} )</td>
<td>( \frac{L}{M} \frac{C^3}{G^2} )</td>
<td>( \frac{c}{G} )</td>
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<tr>
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<td>( \frac{C^2}{G} )</td>
<td>( \frac{L}{M} \frac{C}{G} )</td>
<td>( \frac{c}{G} )</td>
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<tr>
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<td>( \frac{L}{M} \frac{C}{G} )</td>
<td>( \frac{L}{M} \frac{C}{G} )</td>
<td>( \frac{L}{M} \frac{C}{G} )</td>
<td>( \frac{c}{G} )</td>
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<tr>
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<td>( \frac{M L C^3}{G^2 C} )</td>
<td>( \frac{M L C^3}{G^2 C} )</td>
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<td>( \frac{L}{M} \frac{C}{G} )</td>
<td>( \frac{L}{M} \frac{C}{G} )</td>
<td>( \frac{c}{G} )</td>
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</tr>
<tr>
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<td>( \frac{M^2 L C^4}{h^2} )</td>
<td>( \frac{M^2 L C^4}{h^2} )</td>
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<td>( \frac{M^2 L C^4}{h^2} )</td>
<td>( \frac{M^2 L C^4}{h^2} )</td>
<td>( \frac{c}{G} )</td>
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<tr>
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<td>( \frac{M^3 L C^4}{h^2} )</td>
<td>( \frac{M^3 L C^4}{h^2} )</td>
<td>( \frac{M^3 L C^4}{h^2} )</td>
<td>( \frac{c}{G} )</td>
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<tr>
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<td>( \frac{M^3 L C^4}{h^2} )</td>
<td>( \frac{M^3 L C^4}{h^2} )</td>
<td>( \frac{M^3 L C^4}{h^2} )</td>
<td>( \frac{c}{G} )</td>
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<td>( \frac{M^4 L C^4}{h^2} )</td>
<td>( \frac{M^4 L C^4}{h^2} )</td>
<td>( \frac{M^4 L C^4}{h^2} )</td>
<td>( \frac{c}{G} )</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TIMATRX3.WPD

\[
m_0 / l_0 = c^3 / G
\]

\[
m_0 / l_o = h / c
\]

\[
m_0^3 / l_0 = h^2 / G
\]

**TIME TABLE:** \( T = T(G, M, L, h, c) \)

\[
[T] = 1
\]

<table>
<thead>
<tr>
<th>ML</th>
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<th>(+0.5)</th>
<th>(+1)</th>
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<td>(G^2M^4/hc^4)</td>
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<td>(\sqrt{G^3M^6L^2/h^3c^5})</td>
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<tr>
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</tr>
<tr>
<td>(+2)</td>
<td>(\sqrt{G^4M^6/Lhc^9})</td>
<td>(\sqrt{G^3M^6L^2/h^2c^6})</td>
<td>(\sqrt{G^2M^6L^3/h^2c^3})</td>
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</tr>
<tr>
<td>(+1)</td>
<td>(\sqrt{G^3M^6h/L^2c^9})</td>
<td>(GM/c^3)</td>
<td>(\sqrt{GM^2L^3/h^2c^3})</td>
<td>(ML^2/h)</td>
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<td>(\sqrt{Lh/Mc^3})</td>
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<td>(L^2c/GM)</td>
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<td>(L^2h^2c^2/GM^3)</td>
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<td>(h^3/GM^4c)</td>
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<td>(L^2hc^2/GM^3)</td>
<td>(L^2hc^2/GM^3)</td>
<td>(\sqrt{L^4hc^3/GM^3})</td>
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</tbody>
</table>

**Notes:**
- \(G, h, c, M, L\) are symmetric.
- Intersecting at common time \( t = \frac{L}{c} \).
- \( h\) and \( c\) have symmetry.
- Intersecting at \( \tau = \sqrt{\frac{2Gm}{GM}} \) Kepler time.
- \( m\) and \( c\) have symmetry.
- Intersecting at \( \frac{h^2}{c^2} = \tau \) time.
- Cartesian - continuous - space

- Grid or eigen-spaces
  - exponents
    - 3 unit
    - 2 unit Newton
    - 1 unit Maxwell
  - M, L, T, dimensionality grid \[ | \Omega | = \sqrt{M^2 L^2 T^2} \]
  - Vector Space measurement direction (or dimensionality)
  - scalar \( \propto \)
  - \( G, c, h \) exponents \( \rightarrow \) Planck Particle
  - Matrix e.g. \( 7 \) or \( 21 \) \( c, g, h, M, L \)
  - \( 1 \text{ or } \pi \)
  - Structure in eigen-spaces
  - Ratio \( \rightarrow \) pure numbers \( a, \mu, S \)
  - \( a, \mu, S = G, c, h \cdot \text{Cosmic eigen-space} \)
  - size \( \times \) dimensionality
    - measurement
  - Gaps - intervals with divarications are \( f(x, a, \mu, S) \)

Examples of \( | \Omega | \)

\( G = m^{-1} L^3 T^{-2} \)
\( | \Omega | = \sqrt{\hbar} \)
\( Y \sigma G (c, h) = -7.175296 \)

Mixed dimension: \( x, y \) continuous, \( z \) discrete etc.
\[ \gamma(kc) = 16.500104 \]
\[ \gamma(G) = -7.175296 \]
\[ \gamma(G) = -23.0675400 \]
\[ m_p = -23.776602 \]
\[ \gamma(G), \gamma(kc) = -m_0^2 = 9.324808 \]
\[ \gamma(G)m_0^2 = -11.837700 \]
\[ \gamma(kc)m_0 = +11.837700 \]

\[ h_c = M L^3 T^{-2} \]
\[ G = M^{-2} L^3 T^{-2} \]
\[ \frac{hc}{G} = M^2 = m_0^2 = -9.324808 \]

\[ \frac{G}{h} = -26.976924 \]
\[ -7.175296 \]
\[ -34.152230 \]
\[ 10.476821 \]
\[ -44.1629049 \]

\[ \frac{G}{h} = 10.476821 \]
\[ -7.175296 \]
\[ 3.861325 \]
\[ -26.976924 \]
\[ -22.248949 \]
\[ 30.278449 \]
Dimensionality space is a portion of a unit grid:

\[ M = \{-1, 0, 1, 2\} \]
\[ L = \{-1, 0, 1, 2\} \]
\[ T = \{-1, 0, 1\} \]
with unit = \(\frac{1}{2}\)

Dimensionality space is a sub-part of an exponential grid

An exponential grid is a vector space, all vectors having integer components

\[ r = \sqrt{a_x^2 + a_y^2 + a_z^2} \]

Scalar magnitude = \(E\) - a measure of

A dimensionless field is a vector of magnitude \(E\) and direction

measured

\[ E \cdot r \]

Exponential grid is an array \(M = 3, L = 3, T = 3\)

Grid unit: \(\frac{1}{2}\) - Newtonian
\(\frac{1}{2}\) - Maxwellian

If grid unit \(\mathbb{R}^3\) only \(O\) and Energy on \(L^3\)

\[ M \cdot L^2 \cdot T^{-2} \]

\[ n = 3 \]

\[ i = 1, 2, 3 \]

\[ r \in L^3 \]

\[ a = \sqrt{9 - \frac{6}{4}} = \frac{1}{2} \sqrt{15} \]

\[ a = \frac{\sqrt{15}}{2} \]
Gravitational Energy

\[ \frac{GM^2}{L} = \frac{M^2}{L} \frac{G}{m_0} \]

\[ \frac{GM^2}{L} = \frac{M^2}{m_0} \frac{G}{L} = \frac{M^2}{L} \frac{\ell}{\ell_0} \]

\[ B = -27.827840 \]

\[ D = 44.119079 \]

\[ C = 16.291238 \]

\[ L = 17.987 \]

\[ \ell = 17.987 \]

\[ 38.578864 \]

\[ 17.987126 \]

\[ \frac{GM^2}{\ell_0} = 10.291237 \]

\[ 52.265490 \]

\[ 351.974253 \]

\[ 17.987123 \]

\[ 53.961373 \]

\[ (17.987)^{2/3} \]

\[ 52.265490 \]

\[ 32.290 \]

\[ A = 17.987123 = \frac{S}{(\kappa \mu)^{2/3}} \]

\[ B = 77.583870 = \frac{S}{(\kappa \mu)^2} \]

From forces

\[ \frac{B}{A} = A \]

\[ \frac{A^2}{B} = \frac{A^2}{B} = (\kappa \mu)^{2/3} \]

\[ \frac{B}{A} = \frac{B}{A^4} = (\kappa \mu)^{2/3} \]

\[ \frac{S}{\kappa \mu} = (\kappa \mu)^{2/3} \]
\[ T_\mu = \frac{M^2}{\hbar^2} \quad \text{(no \ mu, no \ h)} \]

2 times = that do not continue

\[ M^3 L = \frac{h^2}{G} = -46.778552 \]

1\textordmasculine} solution:

\[ M = \frac{h^2}{G} = -23.389274 \]

\[ L^2 - \frac{h^2}{G} = 23.389274 \]

2\textordmasculine} solution:

\[ M = \mp \rho, \quad L = 23.776602 \]

\[ L = \frac{241.55254}{(\alpha \mu)^3} = R_u = \frac{G \mu}{c^2} \]

\[ \frac{L}{L} = \frac{27.932478}{241.55254} = 0.3381224 \quad (\alpha \mu)^3 \]

\[ R_u = \frac{L}{(\alpha \mu)^3} \]

**Times not containing c**

<table>
<thead>
<tr>
<th>$M$, $L$</th>
<th>$T$</th>
<th>$\frac{L^2}{G M^2}$</th>
<th>$\sqrt{\frac{L^3}{G M}}$</th>
<th>$\sqrt{\frac{V}{G M}}$</th>
<th>$\sqrt{\frac{V^2}{k}}$</th>
<th>$\sqrt{V G M L^2 / k}$</th>
<th>$\sqrt{V G M L^2 / k}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2, +1</td>
<td>$L \hbar / G M^2$</td>
<td>$X$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\frac{1}{2}, \frac{3}{2}$</td>
<td>$\sqrt{\frac{L^3}{G M}}$</td>
<td>$M^3 L = \frac{h^2}{G}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+1, +2</td>
<td>$ML^2 / k$</td>
<td>$M^3 L = \frac{h^2}{G}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5, 2.5</td>
<td>$\sqrt{V G M L^2 / k}$</td>
<td>$M^3 L = \frac{h^2}{G}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The c-free clocks resonate at $M^3 L = \frac{h^2}{G}$ on a\textordmasculine} solution $M = \mp \rho$, $L = R_u$.

*As with solutions $M = \pm \rho$, but the size of a Schwarzschild Universe.

\[ B$\textordmasculine} solution $M = \pm \rho$:

\[ L = l_0 \]

\[ 4 = 20 \text{5} = 2010 \]

\[ H^0 \]

\[ M = m_e \]

\[ L = +34.342981 \]

\[ 5$\textordmasculine} $L = -12.550068 = \rho, M = -11.409495 \]

\[ G$\textordmasculine} $L = L_u = 27.9132478, M = -24.903677 = \frac{M_p}{\alpha \hbar} \]
Artletter.wpd April 6, 2010

Glad you arrived safely in spite of winds, earthquakes, and California drivers doing their thing.

It rained most of Sunday and a bit on Monday, but by noon Monday the weather gods figured out that you were no longer in Sonoma County and the clouds, sky, and light put on a performance that lured hundreds of cameras out of their cases and the sound of their clickings replaced the sound of rain drippings.

I hope you found all well in both Bakersfield and Flagstaff. Please give everyone a hug for me.

love,
Dad

-----Original Message-----
From: art@wilsonint.org
To: alw1871@aol.com
Sent: Mon, Apr 5, 2010 10:10 pm
Subject: Arrival

Hi Dad and all,

In spite of the high wind -- gusts above 50 mph -- I held the big black beast onto the road (trouble started at about the Colorado River) and made it safely home. A few minutes before I got to Flagstaff's intersection of I40 and I17, someone's trailer and pickup were flipped by the wind, and someone else piled into them -- we snaked by on one lane as the emergency folks swarmed over the scene. At about the same time, dust picked up between Flag and Winslow, there was a 43-car pileup, and I40 was closed. The gusts are to continue all night long; power has flickered on and off, of course. The rain in Sebastopol cleared up to a mist after I got over Altamont Pass -- and this morning, the rain had moved to Bakersfield! I got to drive in a snowstorm over Tehachapi Pass -- fine by me with my winter car, but I was more than a little concerned regarding the California drivers on the road. Even had rain off and on between Barstow and Needles! No doubt part of the Communist/Socialist conspiracy, along with the Mexicali quake.

Anyway, thanks again and I'll keep you all posted.
Equating any two values of $T$ from the $T$-Table

1) \[ \frac{M}{L} = \frac{C^2}{G} \]

or 2) \[ ML = \frac{\hbar}{c} \]

or 3) \[ P \]

both time $\neq \hbar$ \[ \frac{M}{L} = \frac{C^2}{G} = \frac{6.7 \times 10^{-3}}{28.2} \approx \frac{1}{2} \]

both time $\neq \hbar$ \[ ML = \frac{\hbar}{c} = -37.4 \times 10^{-5} \]

mixed \[ \text{freq. remains} \]

both time $\neq c$ \[ M^3L = \frac{\hbar^2}{c} = -46.7 \times 8552 \]

if $M = m_0$, then $L = 0$

\[ M = 25 \]

\[ L = 27 \]

\[ \text{clock steady rate} \]

\[ \text{change does not occur with time, only when clock rate changes} \]

\[ \text{change happens only with rate change} \]

\[ \text{freq. change} \]

both time $\neq G$ \[ ML = \frac{\hbar}{c} \]

both time $\neq G$ \[ \frac{M}{L} = \frac{C^2}{G} \]

\[ t = \frac{t}{c} \]

the only time that does not contain both \[ t \text{ and } c \]

\[ \sqrt{\frac{\hbar^2}{GM}} = 2 \]

does not contain \[ c \]

\[ T \text{ does not contain } t \]

\[ V = \frac{M^2L}{K} \]

does not contain \[ c \text{ or } \theta \]

\[ \text{do time } \neq \hbar \]

\[ \text{time } \neq G \]

\[ \text{time } \neq c \]
From Vietnam to Iran and the March of Either/Or Thinking

\[
\begin{align*}
\frac{\frac{4}{7} \cdot m}{h} &= \frac{\frac{4}{7} \cdot m}{h} \\
\frac{\frac{4}{7} \cdot m}{h} &= \frac{\frac{4}{7} \cdot m}{h}
\end{align*}
\]

Resonances:

\[ T_{m_e} = T_{\phi} \]

\[
\begin{align*}
\text{No A} & \quad T_{\phi} = T_{\phi_e} \rightarrow M_1 L = \frac{\mu}{G} = -37.568744633 = Q_1 \\
\text{No C} & \quad T_{\phi} = T_{\phi_e} \rightarrow M_2 L = \frac{\mu^2}{G} = \frac{28.128937025}{G} = Q_2 \\
\text{No C} & \quad T_{\phi} = T_{\phi_e} \rightarrow M_3 L = \frac{\mu^2}{G} = -46.778552241 = Q_3 \\
& \quad \frac{Q_3}{Q_2} = \frac{\mu}{G} = m_1^2 \\
& \quad m_0^2 = 9.324807578
\end{align*}
\]

Equilibrium Forces

No A Forces also with \( F_{\phi} \) \( F_{\phi_e} \) \( \rightarrow M_3 L = \frac{\mu^2}{G} \)

as do No C Forces in resonance
THE POWER OF SYMMETRIES

4 Transformations
- Translation: N-S, E-W
- Rotation: clockwise - counterclockwise
- Dilation: Expansion - Contraction
- Reflection: Chirality
- Anti-Matter - charge relation
- Dark Matter? to Baryonic Matter

5 LOGIC VALUE SYSTEMS

2 Value: Aristotelian Logic T or F LVM
3 Value: TRUE, FALSE, NEITHER LMM
4 Value: LOGOS, TEZI, T, F, M, T

DOGMA: T 17

1 Tension: Enemy 2: Conflicting, both believe.

- SEMIOTICS
  - Language
  - Sign - MAPS
    - Ritual
    - Landscaping - Architecture
  - Math - Music

Delivers us from semiotic "middle man"
and realist

9 Interpretive pronouns: Let x Muen, q Jegal

- Who
- What
- Why
- Whence
- When
- Which

Our Reality a small world
- A piece of space: de-continualized
- A piece of time: de-continualized

But still connects to the greater
here and diachronic now
i.e. REALITY

ONTIC

REALITY MATROSHKA

ONIONS

SA 5-20-10
10:00 AM
Centrifugal force \[ \omega r \]

Conservation of angular momentum \[ \omega^2 r \]

Coriolis - Centrifugal symmetry

\[ \frac{d\vec{B}}{dt} = \frac{d\vec{B}}{dt}_{\text{nonrot}} + \omega \times \vec{B} \]
SYMMETRIES and INVARIANTS

FIRST DYAD

THINGS - RELATIONS
MANIFEST UNMANIFEST

KANTS DYAD

MACH

what changes
are content free?

ORTHOGONALITY and \(\mathbf{A}\)lgebra from content

ANGLES are unit free

ORTHOGONALITY is INDEPENDENCE

DIMENSIONALITIES LINK DIMENSIONS

DIMENSIONS are ORTHOGONAL

ABOUT

FORCE [ C WIDTH OF NOW]

MUTUALITY INVOLVES ROTATIONS

SPECIES OR DEGREES: LINKS, CONNECTIONS

Usually, a Force is a sub-species of links or connections

that \(\hat{r}\) or \(\hat{v}\) distance

e.q. gravity

Morphic Forces: space \(\rightarrow\) mass

Fotem Forces: non-locality

Self-Organisation

If \(\exists\) any limits [link] anything goes
System self-organises in a gravity acting
Set \& conformity ? The Miss Mamo's Paradox

The more synchronous the force, the more violent
in fact violence is very rare now

Forces and their effects must be measured as functions (width of now)

Also \(\exists\) Self-Fragmentation, e.g. Schrödinger to remove obstructions to diversity
\[ M = a c + i b G \]
\[ L = p G + i G \]
\[ \frac{M}{L} = \frac{c^2}{G} \]

\[ M = c + i G \]
\[ L = G + i G \]
\[ \frac{M}{L} = \frac{(c + i g)(G - i c)}{(G + i G)(G - i c)} = \frac{cG + cG + i(G^2 - c^2)}{G^2 + c^2 + i(c^2 - cG)} \]
\[ = \frac{2 c G + i(G^2 - c^2)}{G^2 + c^2} = \frac{c^2}{G} \]
\[ (\text{ii}) \]
\[ M = a c + i b G \]
\[ (c + g) G = \tilde{c} (p - b) G \]

\[ m_p = a^2 m_0 \]
\[ r_0 = b^2 l_0 \]
\[ a = -19, 114 \]
\[ b = 20, 171 \]
\[ m_p + i r_0 \]
\[ \tilde{r}_0 (m_p + i r_0) = b^2 l_0 + c a m_0 \]
\[ (a + i b) (m_0 + i l_0) = m_p + i r_0 \]
\[ \beta \tilde{r}_0 = i a m_0 \]
\[ - \beta r_0 = b^2 l_0 \]

\[ i (\omega)(m_0 + i l_0) \]
SPECIES OF SYMMETRY

(WELL PROPORTIONED) BALANCED
CONCORDANCE OF PARTS

GEOMETRIC

BILATERAL - REFLEXY
TRANSLATORY
ROTATIONAL
SCALAR

INVARIANCE OF CONFIGURATION OF ELEMENTS
UNDER A GROUP OF AUTOMORPHIC TRANSFORMATIONS

Reflection in a plane is an automorphism

Harmony in Music
Pitch / Rhythm

Cparity

* The symmetry of the Normal Distribution

The S - A DIALECTIC

mp - Ms - Mn

REF

Science and the Future 1975
p 242-59
on matter and symmetry

TILINGS
POLYTOPES
2 Ancient Myths contain stories of the "lower world."

The region is often the abode of the dead, and in
some traditions, the realm of punishment for those
who were evil. And hell is a place of fire and
avengement.

As we learn to graduate from our literal reading of
myth, we often discover they are about great truths
that we have described in a different language.

And about great truths we have speculated about but
not yet grasped. Myths of creation, successive dynasties
of gods, ancient visitors to earth, and many others.

Putting myths in juxtaposition with the findings of modern
science, they seem to do some similar concepts.

e.g. The lower world with black holes

purification with intermediate states of matter like meson
states

What we have read as spiritual in myth may also
describe what we are discovering in the world of matter.

And there is suspicion of not only description of reality.
But of a symmetry between the process of spirit and matter.

Indeed, there is a suspicion of many symmetries.

Let us juxtapose
the mundane with
the godly

within death

within the glass of symmetry

in myth

\( \mathbb{G} \)-SPACE

perhaps the Planck level (point)

in the Tori class of symmetry

in the physical world

some classes or level

\( \mathbb{P} \)-SPACE

4 - 7 - 2010

And supporting all
N-SPACE NUMBER
Dynasties of gods

Uranus  Eluhim
Titam   Yaweh
Olyurmum Adam

Humans

Days of Creation
Dark  Light
Babyn  Dark density  Meta p

Ahura Magda  Ahriman

M  = TH

Metaphor

Machine

Machine
IN VARIANTS

BRAHMANS: The Parmenidean and Parmenidean
The ultimate unchanging base, foundation, eternal structures.

Example:
- $G$, $c$, $k$
- $e$, $o$, $i$

Minkowski's space-time

SYMMETRIES

INVARIANTS

SPATIALITY

HUMS

Geometry means:

Loop Matroshkas

- day
- year
- solar system
- galaxy
- cosmos

Cf. Kalpas

- Yuga
- Brahma
- Baktuna

$\text{mass} = \frac{S}{\text{amu}}$

Space $\text{amu}$

(amu)$^{-}$
More in cont. dis.

Bound fields, Bound states

3 cont. 1 dis. 4 force, class

Nested Bases, Matter

3 basis, 3 cont.

\[
\begin{align*}
C &= 0 \\
\frac{\left(\frac{GM^3L}{h^2}\right)^n}{G^2M^6L^2} &= \frac{C^4}{L^2} \left(\frac{M_0}{M}\right)^6 \\
\frac{C^4\left(\frac{GM}{C^2L}\right)^2}{G} &= \frac{G^2M^2}{L^2} \\
\frac{C^4\left(\frac{ML}{h}\right)^2}{G} &= \frac{ML}{L_0^2} \\
\hat{t} &= 0 \\
F(M, L) \left(\frac{GM}{C^2L}\right)^n &= \frac{G^2M^2}{L^2} \text{ where } n = M - L + 2 \\
F(M, L) \left(\frac{G^2M}{C^2L}\right)^b &= \frac{C^4}{G} \text{ where } b = M - L \\
(-\frac{1}{2})^{\frac{3}{2}} \frac{C^4}{L^2} \left(\frac{GM}{C^2L}\right)^{-2} &= \frac{C^4}{G} \left(\frac{G}{C}\right)^{-2} \\
G &= 0
\end{align*}
\]
SPECIES of CLOCKS

\( G, c, \ h \) most

\( G, c, \ h \neq c \) \( \Rightarrow \frac{M}{L} = \frac{c^2}{G} \)

\( G, h \neq c \) \( \Rightarrow \frac{M^3 L}{G} = \frac{L}{c} \)

\( c, h \neq G \) \( \Rightarrow \frac{M L}{c} = \frac{L}{G} \)

\( \) only \( c \neq h \)

\( \) only \( h \neq c \)

\( \) only \( G \neq c \)

\( \) none or none

Resonance Domain

\( \frac{c^2}{G} = \frac{M}{L^3} \quad \frac{M^3 L}{G} = \frac{L^3}{G^2} \)

Relations between \( m_p \) and \( u \)

\( \sqrt{\frac{3}{2}} \sqrt{\frac{3}{2}} m_o = m_p \)

\( m_p^3 R_u = \frac{h^2}{G} \)

\( m_p^2 L_u = \frac{\pi \nu (\alpha \mu)^3}{G} \)

\( (S_0)^{3/4} m_o = m_v \)

\( M_v = \left( \frac{s}{\alpha \mu} \right)^2 m_p \)

\( M_v = \left( \frac{s}{\alpha \mu} \right)^{3/2} m_o \)

\( M_v (\alpha \mu)^3 = \frac{c^2}{G} \)

\( \frac{m_p}{m_o} = \frac{S}{L_u} \)

\( \frac{M_v}{L_u} = \frac{c^2}{G} \)

\( \frac{M_p}{R_p} = \frac{G m_p}{c^2} \)

\( \frac{R_p}{L_u} = \frac{(S)^2}{(\alpha \mu)^3} \)

\( \frac{R_p}{L_u} = \frac{d \mu S}{r_e} \)

\( \frac{1}{r} = -37.453745 \)

\( m_p R_e (\alpha \mu) = \frac{h}{c} \)

\( M_v R_v S^{-3} = \frac{h}{c} \)

\( m_o \cdot L_o = \frac{1}{c} \)
RESONANCES

\[ +3 \rightarrow -1 \Rightarrow M^2 = \frac{h^2}{G} \]

\[ M^2 = \frac{h^2}{G} \]

\[ M_L = \frac{1}{2} \]

Destinations \( m_0 \):

\( l_0 \):

5 destinations:

\[ m_0 \]

\[ l_0 \]

\[ \frac{m}{L} = \frac{C^2}{G} \]

\[ M_L = \frac{h}{2} \]

\[ h^2 = \frac{h^2}{G} \]
STRUCTURE FORMULAE

\[ M'_n = \frac{M_0^{n+1}}{M_{-1}^n} \]

\[ \frac{L'}{L_n} = \frac{L^n}{L_{-1}^{n-1}} \]

\[ R'_n = \frac{G}{C^2} \frac{M_0^{n+1}}{M_{-1}^n} \]

\[ \frac{L}{R'_n} = (\frac{\Delta \mu}{c^2})^n \]

\[ R_{[n]} = \frac{G\mu}{c^2} \]

Subscripts:
-1 = B
0 = E
1 = D
2 = A
3 = \nu

Superscripts:
\[ M_0 \]
\[ M_1 \]
\[ M_2 \]
\[ M_3 \]
\[ M_{-1} \]

Exponents:
\[ a, b, c, d, e \]

For \( n = 0, 1, 2, 3 \)

\[ M'_n L'_m = \frac{c^2}{G} \left( \frac{M_0 L_0}{M_{-1} L_{-1}} \right)^n = \frac{c^2}{G} (\Delta \mu)^n \]

For \( n = 0 \),

\[ \frac{M'_0}{R'_0} = \frac{c^2}{G} \]

\[ M'_0 = \frac{G}{c^2} m_0 (\frac{\Delta \mu}{c^2})^n = \frac{c^2}{G} (\frac{\Delta \mu}{c^2})^n \]

\[ M'_n R'_n = \frac{G}{c^2} m_0 (\frac{S}{\Delta \mu})^n = \frac{c^2}{G} (\frac{S}{\Delta \mu})^n \]

For \( n = 0, 1, 2, 3 \), hav \( \nu = -1 \)

\[ m_0 \left( \frac{L_0}{c^2} \right)^n = \frac{c^2}{G} \]

\[ m_0^3 \frac{L_0}{c^2} = \frac{c^2}{G} \]

Source of \#1 and 2:

\[ T + \lambda = 9, M = 1 \Rightarrow \frac{a}{L} \] 

\[ M^3 L E^n \] are forces

For times not centenary, c

\[ \frac{h^2}{c} = -46.758 \times 557.241 \]

\[ \neq M, L \]

-2, -1

\[ \frac{-1}{2}, \frac{1}{2}, \frac{3}{2} \]

and \( \Theta = -1, 0 \)

\[ +1, \frac{1}{2}, \frac{3}{2} \]

\[ +2, +2.5, +2.5 \]

\[ a/s, M_3 = \frac{m_2}{m_1} \]

\[ M_3 = \frac{m_0^{\mu^4}}{m_0^{\gamma^4}} \Rightarrow \frac{M_3^2}{m_0^{\mu^4}} = \frac{m_0^{\gamma^4}}{m_0^{\gamma^4}} \]
M, R. The unexpanded universe

L is result of expansion
inc x^2, y, S factor etc

\[ M \approx R \]

\[ k = \frac{c}{G} \]

\[ M \cdot 10^{-23} = R \]

\[ M^3 L = \frac{\hbar^2}{G} \]

\[ R^6 L = \frac{\hbar^2 \alpha^3}{G \epsilon^6} = \lambda_0^4 \]

\[ L_n = \frac{\lambda_0^n}{R_n^3} \]
\[ L = \frac{C^2}{G} \quad \rightarrow \quad \frac{G \cdot M^3}{L^2} \quad \rightarrow \quad \frac{C^2}{G} \]

\[
\begin{align*}
\frac{5}{2} \cdot \frac{1}{2} & \quad \frac{\hbar}{G \cdot M \cdot L} \cdot \left( \frac{G \cdot M^3 L}{L^2} \right)^2 \quad \frac{\hbar^2}{G \cdot M^2} \\
\frac{1}{2} & \quad \frac{\hbar^2}{M \cdot L^2} \cdot \left( \frac{G \cdot M^3 L}{L^2} \right)^{\frac{1}{2}} \quad \frac{1}{2} - M \\
& \quad \frac{1}{2} \quad \frac{\hbar^2}{M \cdot L^2} \cdot \left( \frac{G \cdot M^3 L}{L^2} \right) \quad 3L + 1 \\
& \quad \frac{1}{2} \quad \frac{\hbar^2}{M \cdot L^2} \cdot \left( \frac{G \cdot M^3 L}{L^2} \right) \quad 3L + 1 \\
& \quad - \frac{7}{2} \quad \frac{\hbar^2}{M \cdot L^2} \cdot \left( \frac{G \cdot M^3 L}{L^2} \right) \quad 3L + 1
\end{align*}
\]

\[ \frac{1}{2} \cdot \frac{\hbar^2}{L^2} \cdot \frac{G \cdot M^3}{L^2} \quad \rightarrow \quad \frac{M}{L} = \frac{\hbar^2}{G} \quad \text{the centrifugal gravity balance of orbiting planets} \]

\[ \frac{M}{L} = \frac{\hbar^2}{G} \quad \text{or} \quad R = \frac{\hbar^2}{G} \]
BEHOLD THE SPIRIT
Alan W. Watts
1947
III-A-4
Religion, Philosophy

NATURE, MAN AND WOMAN
Alan W. Watts
1958
III-A-4
Philosophy, Religion

THE BOOK ON THE TABOO AGAINST KNOWING WHO YOU ARE
Alan W. Watts
1966
III-A-4
Philosophy, Religion

MYTH AND RITUAL IN CHRISTIANITY
Alan W. Watts
1968
III-A-4
Philosophy, Religion
\[ F = 0 \]

\[ \frac{F(M, L)}{G} \cdot (\frac{GM}{C^2})^{\mu} = \frac{GM}{L^2} \]

\[ (GM)^{\mu} \] is a "vector identity." \[ [0] \]

\[ L = M - 3M + 3 \]

\[ F(M, L) \cdot (\frac{GM}{C^2})^{\mu} = \frac{C}{G} \]

\[ k = M - L \]

\[ F(M, L) \] \[ M, L \] values

\[ \frac{G}{0} \]

\[ F(M, L) \cdot (\frac{MLC}{k})^{\mu} = \frac{L^2}{C^2} \quad \text{when} \quad \frac{MLC}{k} = \frac{3M - L}{G} \]

\[ (\frac{MLC}{k})^{\mu} \] is a vector identity. \[ [0] \]

\[ \frac{F(M, L)}{G} \cdot (\frac{C^2}{GM^2})^{\mu} = \frac{C}{G} \]

\[ (\frac{C^2}{GM^2})^{\mu} \] is a "vector identity." \[ [0] \]

\[ G = 0 \]

\[ F(M, L) \cdot (x) = \frac{C}{G} \quad \text{for each} \quad G = 0 \]

\[ \frac{F(M, L)}{G} \cdot (\frac{MLC}{k})^{\mu} = \frac{L^2}{C^2} \quad \text{when} \quad \frac{MLC}{k} = \frac{3M - L}{G} \]

\[ (\frac{MLC}{k})^{\mu} \] is a "vector identity." \[ [0] \]

\[ G = 0 \]

\[ F(M, L) \cdot (\frac{MLC}{k})^{\mu} = \frac{C}{G} \quad \text{where} \quad \mu = M + L \]

\[ \frac{(MLC)^{\mu}}{k} \frac{ch}{GM^2} \rightarrow \frac{C}{G} \quad \text{vector identity.} \]

\[ G = 0 \]

\[ F(M, L) \left( \frac{ch}{GM^2} \right)^{\mu} \quad \text{where} \quad \nu = 3M - L \]
\[ \frac{\ell^2}{\bar{M} \ell^3} \left( \frac{\ell \bar{M}}{C^2 \ell^2} \right)^n = \frac{\bar{C}^4}{\bar{G}} \]

\[ M \ell \in \{2, -1\}, \quad k = 3 \]
\[ \frac{\ell^3}{\bar{M}^3} \left( \frac{\ell \bar{M}}{C^2 \ell^2} \right)^k = \frac{\bar{C}^4}{\bar{G}} \]

\[ \bar{G} = 0 \rightarrow \frac{h \bar{C}}{\ell^2} \rightarrow \frac{\bar{C}^4}{\bar{G}} \rightarrow \frac{h \bar{C}}{\ell^2} \rightarrow \frac{\bar{C}^4}{\bar{G}} \]

\[ L - 3 \bar{M} \]

\[ \bar{N} = L - 3 \bar{M} \]

\[ \left( \frac{\ell}{\bar{M} \ell} \right)^n \frac{h \bar{C}}{\ell^2} = \frac{\bar{C}^4}{\bar{G}} \]

\[ \left( \frac{h \bar{C}}{\ell^2} \right)^n \frac{\bar{C}^4}{\bar{G}} = \frac{\bar{C}^4}{\bar{G}} \]

\[ \left( \frac{C^2 \ell^2}{\bar{G} \bar{M}} \right)^n = \frac{\bar{C}^4}{\bar{G}} \]

\[ \left( \frac{h \bar{C}}{\ell^2} \right)^n \frac{\bar{C}^4}{\bar{G}} = \frac{\bar{C}^4}{\bar{G}} \]

\[ \left( \frac{C^2 \ell^2}{\bar{G} \bar{M}} \right)^n = \frac{\bar{C}^4}{\bar{G}} \]

\[ \left( \frac{h \bar{C}}{\ell^2} \right)^n \frac{\bar{C}^4}{\bar{G}} = \frac{\bar{C}^4}{\bar{G}} \]

\[ \left( \frac{C^2 \ell^2}{\bar{G} \bar{M}} \right)^n = \frac{\bar{C}^4}{\bar{G}} \]
\[
\begin{array}{ccc}
\frac{G M^2}{L^2} & \frac{M C^2}{L} & \frac{\hbar^2}{ML^3} \\
42.320136 & 45.701357 & -19.0431976 \\
\frac{C^4}{G} \left(\gamma \mu \right)^{-2} & \frac{C^4}{G} \left(\gamma \mu \right)^{-3} & \frac{C^4}{G} S^{-6} (\gamma \mu)^{-7} \\
44.574284 & 46.828431 & -110.593458 \\
\frac{C^4}{G} \left(\gamma \mu \right)^{-4} & \frac{C^4}{G} \left(\gamma \mu \right)^{-3} & \frac{C^4}{G} S^{-8} (\gamma \mu)^{-2} \\
48.82432 & 47.955805 & -30.755440 \\
\frac{C^4}{G} \left(\gamma \mu \right)^{-2} & \frac{C^4}{G} \left(\gamma \mu \right)^{-1} & \frac{C^4}{G} S^{-2} (\gamma \mu)^{-1} \\
51.62847 & 49.082578 & C^4/\sigma \\
\frac{C^4}{G} S^{-2} & \frac{C^4}{G} S^{-1} & \frac{C^4}{G} S (\gamma \mu)^{-2} \\
-29.628374 & 9.727107 & 7.472959 \\
\frac{C^4}{G} S^{-3} & \frac{C^4}{G} S^{-1} & \frac{C^4}{G} S (\gamma \mu)^{-2} \\
\end{array}
\]
What postulates, ... assumptions, rules are needed to construct a Cosmic Template? [Cosmography]
**Basic Quantities**

\[ m_0 = -4.662 \times 10^3 \, 789 \]
\[ m_0^2 = -9.324 \times 807 \, 578 \]
\[ m_0^3 = -13.987 \times 211 \, 367 \]
\[ m_0^4 = -18.649 \times 615 \, 156 \]

\[ m_p = -23.776 \times 602 \, 304 \]
\[ m_p^2 = -47.553 \times 204 \, 608 \]
\[ m_p^3 = -71.329 \times 806 \, 912 \]

\[ C = 10.476 \times 710 \, 703 \]
\[ \mathbf{1} = -20.976 \times 930 \, 930 \]
\[ G = -7.175 \times 295 \, 619 \]
\[ C^2 = 28.128 \times 937 \, 025 \]
\[ \mathbf{1} \]

\[ \frac{\mathbf{1}}{C} = -37.453 \times 744 \, 633 \]
\[ \mathbf{1} \]

\[ \frac{\mathbf{1}}{G} = -46.778 \times 552 \, 741 \]
\[ \mathbf{1} \]

\[ \Delta = 19.114 \times 198 \, 575 \]

**Table**

<table>
<thead>
<tr>
<th>( v )</th>
<th>( A )</th>
<th>( \Delta )</th>
<th>( \Delta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{m}{R} )</td>
<td>28.128 938</td>
<td>28.128 938</td>
<td>28.128 937</td>
</tr>
<tr>
<td>( mR )</td>
<td>77.231 450</td>
<td>39.003 053</td>
<td>( \frac{3}{\sqrt{m}} )</td>
</tr>
<tr>
<td>( \frac{M}{L} )</td>
<td>5.477 747 ( \frac{dm}{R} )</td>
<td>25.874 790</td>
<td>( \frac{3}{\sqrt{m}} )</td>
</tr>
<tr>
<td>( mL )</td>
<td>80.612 672</td>
<td>541.257 200</td>
<td>(-5)</td>
</tr>
<tr>
<td>( \Delta' )</td>
<td>41.257 200</td>
<td>(-5)</td>
<td>(-5)</td>
</tr>
</tbody>
</table>

**Equations**

\[ M_u = \frac{m_0^4}{m_p^3} \]
\[ M_r = \frac{m_0^3}{m_P^2} \]
\[ M_o = \frac{m_0^2}{m_p} \]
\[ M_0 = \frac{m_0}{m_P} \]
\[ m_0 = \frac{m_0}{m_P} \]
\[ m_p = \frac{m_0}{m_P} \]
\[ m_0 = \frac{m_0}{m_P} \]

\[ L_0 = \frac{r_o^3}{l_0} \]
\[ L_0 = \frac{r_o^2}{l_0} \]
\[ L_0 = \frac{r_e}{l_0} \]
\[ L_0 = \frac{r_o}{l_0} \]
\[ L_0 = \frac{r_o}{l_0} \]
\[ L_0 = \frac{r_o}{l_0} \]

\[ \frac{\mathbf{1}}{G} = -42.869 801 \]

\[ R = \frac{e}{m} \]

\[ \frac{e}{m} \times 12.550 068 214 \]

\[ R_0 - \frac{32.791 340 828}{7} \]

\[ R_0 - \frac{32.791 341}{7} \]

\[ R_0 = \frac{32.791 341}{7} \]

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\[ R_0 = \frac{32.791 341}{7} \]
\[ \frac{h^2}{G} (\alpha \mu)^3 = m_p^3 L_u \]
\[ \frac{h^2}{G} = m_0^3 \lambda_0 \]
\[ m_p^2 M_u = m_e^4 \]
SYMMETRY

CONCEPT AND DEFINITIONS

• BALANCE ABOUT SOME 'FULCRUM'

\[
\begin{array}{ccc}
\text{AREA} & \text{AREA} \\
\text{SHAPE} & \text{SHAPE} \\
\text{MASS} & \text{MASS} \\
\text{M} \times \text{L} & \text{M} \times \text{L} \\
\frac{\text{M}}{\text{L}^2} & \frac{\text{M}}{\text{L}^2} \\
\end{array}
\]

\[f(x, \ldots) = f'(x, \ldots)\]

• ININVARIANCE UNDER TRANSFORMATION

- ROTATION
- TRANSLATION
- INVERSION (REFLECTION)
- DILATION (SCALE)

[FRACTIONS]

\[F = \frac{ML}{T^2} = \frac{CM}{T} = \frac{CG}{G} = \frac{1}{CT^2} = \frac{MLC^2}{G^2} = \frac{1}{T} \sqrt{\frac{kC^2}{G}}\]
Symmetry

\[ \frac{S}{\Delta \mu} \sim M \quad S \Delta \mu \sim L \]