

A Model that leads to **new knowledge****First Module: An imaginable GENESIS**

T/Q E	Theorem-Question Explanation	<b>The nature of energy</b>
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Text Module = in black, version of **present Physics** = in red

<b>T</b>	The Genesis took place on a rational understandable way.	<p>Yes, because there is now a MODEL that explains where all the ingredients of the Universe come from: dimensions, energy, forces, .... And above all, it is a Model that shows what those ingredients are, what is their Nature. The Model also shows where coherence is coming from.</p> <div style="background-color: #f0f0f0; padding: 10px; text-align: center;"> <p>The Laws of Physics contain ingredients: For example:</p> <ul style="list-style-type: none"> <li>• the <b>dimensions</b> of space and time that shape the Universe,</li> <li>• elementary particles that contain <b>energy</b> and that compose <b>Radiant Matter</b> (photons, electrons, quarks,...= 4%).</li> <li>• Besides there are the <b>forces</b> that organize matter:               <ul style="list-style-type: none"> <li>– gravitation</li> <li>– electro magnetism, weak interaction</li> <li>– and strong interaction.</li> </ul> </li> <li>• Also we have <b>Dark Matter</b> (neutrino's,... = 23%) and <b>Dark Energy</b> (= 73%).</li> </ul> <p style="margin-top: 10px;">These ingredients are necessary to describe the Laws of Physics!</p> </div>
	Thoughts	<p>1) The fact that we now do not know the origin of these ingredients at least is strange.</p> <p>2) <b>An indication that this has to do with our current vision on reality, is that since 1975 there was no further reach in depth in Physics. String- or M-theory and Super Symmetry seem to be dead end streets.</b></p>
<b>T</b>	This entrenched situation in Physics and/or Science in general has to do with the approach.	<p>Since Newton mathematics dominates the field of Physics. The pragmatic<sup>1</sup> propositions that result from this end up in the fact that we can only describe the outside of things, i.e. <b>the behavior of Matter/Nature</b>. A consequence of this is that we do not understand the inside, i.e. that what drives the energy/forces, that what obliges Matter to come together and what makes it grow to complex organisms.</p>
	Thoughts	<p>1) Science defines parts of the reality by means of a minimum number of parameters. Parts described in this way are then merged back into generalizations that are regarded as THE reality. This often leads to a misinterpreted reality.</p>

<sup>1</sup> Useful, immediately usable.

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	Analytical worldview ≠ Holistic worldview	Consequences of this approach are: <b>monocausal and linear compartmentalized thinking, a lifeless mechanistic vision.</b>  2) The defaulting worldview has to do with more disciplines than Physics only.
<b>E</b>	The Minkowski space is the basis of the General Theory of Relativity.	<b>The Minkowski space is a system of reference for space and time that was designed by Hermann Minkowski.</b> He developed this mathematical tool to calculate in the combination of space and time. To be able to realize that he had to assign the same nature to both kinds of dimensions otherwise he could not combine them.
<b>Q</b>	How and why the inside, the nature of physical properties disappeared.	Minkowski ignored the specific nature of time with its typical course. Minkowski suggested that the nature of time is mathematically real <sup>2</sup> , just as it is the case with space. Thus, the imaginary <sup>3</sup> nature of time was not seen anymore and effaced via the coordinates.
	Thoughts	1) The pragmatic nature of this approach gave Einstein the opportunity to develop his General Theory of Relativity. Presumably this was the reason why Einstein had no suspicion about the fact that Minkowski's artifice has profound implications.  2) <b>From a letter of Einstein to Solovine in 1953 it appears that he knew very well that only a holistic approach could save us from the impasse in which Physics ended up: first axioms, then theorems and experiments and only then the math.</b>
<b>Q</b>	What didn't we notice?	The course of time is an essentially imaginary or volatile dimension. The Model shows that being imaginary for a dimension means that it knows a course, it has an irreversible nature (explanation in note 2 below). To avoid unnecessary analytical discussions about this given it is included in the model as the only Axiom. Minkowski posted the imaginary in the quantitative, the Model puts it back into the qualitative.
<b>E</b>		1) The complete lack in understanding the phenomenology of an imaginary dimension is the reason why we so far have found no mathematical description for the course of time.  2) A combination of real and imaginary dimensions has no order relation for addition and multiplication. In this model the interpretation of this is that such combinations always lose information. Hence the Axiom that an imaginary dimension is volatile and irreversible.
<b>Q</b>	What is the physical nature of a course?	Phenomenologically a volatile dimension is intangible whilst it is mathematically described as imaginary. The course of time is such a volatile dimension, elementary matter is forced to go along with it. The course makes us irreversibly go with the flow of time.

<sup>2</sup> Measurable, with coordinates that are expressible in real numbers.

<sup>3</sup> Being mathematically imaginary involves working with imaginary numbers, this happens in the coordinates. A dimension that is essentially imaginary, is hitherto unknown in Physics. Before this Model the phenomenology of it was undiscovered.

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<b>Q</b>	How can a course correspond with a reversible time, the existence of which is claimed by the theoretical Physics?	We must not confuse the global impact of the presence of the course of time in elementary matter with its effect inside the elementary matter. The reversibility of time, according to the Model, is due to the presence of other courses, the so-called courses of space.
<b>T</b>	<b>Courses of space exist!</b>	The Model determines that several courses of space exist alongside the course of time. Phenomenologically a course of space tends to drag forth a point in space. A course of space implies an irreversible drive. All courses, thus also the course of time, are in a greater or lesser extent integrated in matter. The activity of courses of space in matter provides the drive for energy and the forces.
<b>E</b>		1) A course of space is an urge to move in space; the Model puts these courses of space instead of certain classical "fields" as a source of forces, such as in electric and magnetic attraction.  2) Qualitatively, there are two types of courses of space: one type has a fixed <sup>4</sup> orientation and the other is variable <sup>5</sup> .
<b>Q</b>	Imaginary dimensions exist alongside <b>another type</b> of dimensions?	In addition to the volatile dimensions real dimensions exist which are reversible. In such a dimension we can go and return. The spatial dimensions, as we perceive them, have characteristics that come very close to them. The real spatial dimensions are not directly observable. Through an affinity of the oriented courses of space $\mathbf{x}'$ , $\mathbf{y}'$ and/or $\mathbf{z}'$ with their complementary real spatial dimensions $\mathbf{x}$ , $\mathbf{y}$ and/or $\mathbf{z}$ , <b>mass formation</b> <sup>6</sup> occurs. Through an affinity of one of the non-oriented courses of space namely $\mathbf{e}'$ with the complementary real spatial dimension $\mathbf{e}$ , <b>charge</b> <sup>7</sup> occurs.
<b>E</b>		The real time and real spatial dimensions form the not directly observable <b>absolute space-time</b> . The existence of an absolute space-time has already been suggested by several investigators <sup>8</sup> .
<b>T</b>	<b>The possible conversion of mass into energy is known, the conversion of charge into energy is not.</b>	1) The drive of the course of space, that allows the existence of mass, can be converted into energy as we know from $\mathbf{E} = m\mathbf{c}^2$ . 2) That involves that also the drive of the course of space $\mathbf{e}'$ , that allows the existence of charge, can be converted into energy as we know from according to the ratio <sup>9</sup> $\mathbf{E} = Q\mathbf{c}^2$ and $Q = q_e m_e / q_e$ or $\mathbf{E} \equiv q\mathbf{c}^2$
	Thoughts	1) This opens new perspectives for the production of energy.  2) <b>This is a fundamentally different explanation of what charge is than</b>

<sup>4</sup> In the Model we call these courses of space  $\mathbf{x}'$ ,  $\mathbf{y}'$  and  $\mathbf{z}'$ .

<sup>5</sup> In the Model we call these courses of space  $\mathbf{d}'$  and  $\mathbf{e}'$ .

<sup>6</sup> Therefore a Higgsboson is not required.

<sup>7</sup> Charge is explained entirely different here than in present Physics..

<sup>8</sup> i.e. Paul Marmet.

<sup>9</sup>  $\mathbf{E} = q_e m_e / q_e \mathbf{c}^2 = Q\mathbf{c}^2$  (the symbol  $\equiv$  makes it possible to write the equation apart from metrics as  $\mathbf{E} \equiv q\mathbf{c}^2$ ) in which  $q$  the amount of charge that is transformed into energy,  $q_e$  and  $m_e$  respectively are the charge and the mass of an electron.

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		<p>that of quantum mechanics. There the charge is a coupling constant, which is an abstract given. In the Model the charge is a physical property similar to mass. The Model thus provides an explanation for some claims regarding mysterious<sup>10</sup> sources of energy<sup>11</sup>.</p> <p>3) We will have to take this into account in an updated law of conservation of energy.</p> <p>4) If the above vision of the nature of mass and charge is correct, then not only quantum mechanics has to be revised. The at CERN discovered heavy particle is a boson or Dark Matter but not the so-called Higgsboson.</p>
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This first module precedes all the modules of a series that, depending on the goal to achieve, can be read in a certain order.

In the next Modules the following topics will be discussed:

Module 2: the evidence

Module 3: HHO (this Module will be divided in a number of sub-Modules)

Module 4: Cold Fusion or LENR

Module 5: The structure of matter

Module 6: The origin and cohesion (also this Module will be divided in a number of sub-Modules).

The last Module determines the order of reading:

M1-M3

M1-M4

M1-M2-M5

M1-M5-M6

<sup>10</sup> See 2<sup>e</sup> module: the evidence.

<sup>11</sup> We have thus abandoned the existence of ZPE (Zero Point Energy) or energy from vacuum.