

## ABOUT THE SINGULARITIES IN BLACK HOLES THE “GARBAGE DISPOSERS”

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This essay considers the black holes working thoughtlessly crushing the matter, being considered like a space curvature, to return it to an original flattened space. Likewise it deals about the relationship between black holes singularities, particles and Planck constants, professedly essential magnitudes in the particles mass formation and essential in the black hole singularity concept.

I would like to differentiate emphatically the content of this text with regard to the published articles, since as distinct from in the last ones, this essay is written without the employment of the mathematical device. With this caution, but using the fundamentals of what for me contributes the essential mathematical exploration and the previous experimental information, I propose a conceptual description of the existing black holes singularities respecting scrupulously the charge and energy conservation principles and taking as a basic prop the concept of vacuum, perhaps final notion where the rest of the discernible natural objects are contained.

Considering the vacuum an equivalence of the spatial dimension, the mathematical form that relates it to the energy across the mass includes three very important universal physical constants: the universal gravitation constant, the vacuum dielectric constant and the vacuum magnetic permeability in agreement with the factor “ $(G \cdot \epsilon_0 \cdot \mu_0)$ ”, which includes the essential parameters that define the energy transmission processes such as electromagnetic radiation, electrical charge and even mass existence if the elementary particles could be considered as a consequence of a extreme spatial curvature according to the capacity of the vacuum in its equivalence “ $x \leftrightarrow m$ ”.

From the previous fact, the study of the relation vacuum-energy proposes some varied consequences, bearing its development to the well known Special Relativity Theory, assuring the constancy of the velocity of light with independence from the velocity of the reference system and so on. Also, it might relate to General Relativity with the elementary particles that shape the matter, across the relation of the spatial curvature with the Planck magnitudes space, time and mass, which would make that the electrical charge and mass properties appear quantized by an agreement in the spatial curvature because of an existing conflict between a constant force value “ $c^4/G$ ” and another with electrostatic character “ $f(q_U, \lambda)$ ”<sup>(1)</sup>, both inherent to the vacuum. Therefore, any natural statement might be described from the spatial dimension structured by certain physical constants, with the vacuum as the only precursor responsible that limits the matter behaviour and the electromagnetic transmission of the information.

Limited some concepts with essential utility for the later reasoning, we only have to apply them to the topic involved in this text, namely, to the supposed behaviour of the hypothetical black holes in the location in which all the physical laws stop working, precisely when the space and time oversteps all through Planck space and time, and black hole becomes a mathematical singularity. And I have used the word hypothetical, because black holes still continue being entelechies despite their existence being generally recognized and supported by the General

<sup>(1)</sup>  $q_U = \sqrt{4\pi \cdot h \cdot \sqrt{\epsilon_0 / \mu_0}} \text{ (cb)}$  ;  $\lambda \equiv \text{Compton wavelength}$ .

Relativity Theory. In fact, inside a Universe in which energy and electrical charge conservation are essential concepts, these cosmic objects should have a necessary existence whenever as proposed previously, elementary particles were created from the extreme vacuum curvature, and the electromagnetic radiation was not any more than its internal structure pronouncement.

Both, particles and black holes would exist as expression of space temporal curvature at different scale levels, *which one would be exactly encountered in the same distance and time: Planck space and time, professedly essential magnitudes along with the Planck mass, in the electron development for example, and essential in the black hole singularity concept.*

Once come to this point, and break through the Planck space and time boundaries, the inverse process of creation would be possible into the black hole, which means the matter destruction and the returning to the initial state, to the simple "space", free of the curvature prison.

When approaching this theory it is curious that the constants " $G, \epsilon_0, \mu_0$ ", joined to the Planck constant " $h$ " as angular moment involved in the curvature, unequivocally and axiomatically provoke very small mass values in an identical way to the observed one, and that the universal gravitation constant " $G$ " disappears when the vacuum is transformed in the elementary particle mass or electrical charge properties as is the electron case. But as in two faces of the same reality, it is precisely the parameter and value of " $G$ " the essential factor that will be active in the union of the matter, imperatively in an admirably cosmic scale. This way, the described physical constants would imply the coexistence of the infinitesimal thing according to concrete and invariable values, and of the immense thing as undeniable destination.

This kind of Universe would exist because it is the only one possible, and would allow its objectivity across the *unthinking and univocal creation* of its fundamental structures, instigating huge distributions as nebulas, planets, stars, galaxies .., that will bear from the gravity to a few restorative black holes working like, for want of an expression, "garbage disposers" that would return the initial perturbations to their essential state.

This interpretation of event horizons, much to my sorrow, but habituated to the few conformity of the nature with a complaisant causality, is very far from the dreamy black holes elucidation, their supposed symmetrical solutions named white holes, and of their possible unions, the so-called wormholes or Einstein-Rosen bridges, as space temporal links that could perhaps be used like shortcuts in spatial travels and even temporary travels; with numerous investigations and publications dealing with this. Nevertheless, and although the proposal developed in this text might not be directly demonstrated because of the destructive enthymeme implied, this disposition would coincide with the natural energy cycle observed in our slightly less dangerous daily environment, and it would confirm the cycles of transformation in contrast with fictitious creation or destruction processes.

The hypothetical black hole "singularity" is the logical candidate to losing the above mentioned description. This might suppose a redefinition of space and time concepts with regard to an intrinsic quantization existence, or the appearance of new cosmological theories, and at least, would suppose the elimination of an inconvenient unexplainable place that insinuates the ineffective operability of the building created by modern physics.

## REFERENCES

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