ABOUT THE SINGULARITIES IN BLACK HOLES THE "GARBAGE DISPOSERS"

Gonzalo A. Moreno Jiménez

email@gonzaloamoreno.com

I would like differentiate emphatically the content of this paper with precise and mathematical based content since this is part of conceptual development. With this caution, but using the fundaments of what for me, contributes to essential exploration and previous experimental information, I propose a conceptual description for black holes singularities respecting scrupulously the charge and energy conservation principles and use the concept of emptiness, perhaps the whole notion where all discernible natural objects are contained.

So considering the concept of emptiness as an equivalence of spatial dimension, the mathematical form that relates it to energy across the mass concept, includes three very important universal physical constants: universal gravitation constant, dielectric constant and magnetic permeability in form " $s=(Ge\mu)\cdot m$ ", which includes the essential parameters that define the energy transmission processes through electromagnetic radiation, the electrical charge and the mass existence, so that elementary particles could be considered as a consequence of extreme curvature of *e*mptiness-spatial magnitude according to its capacity and the equivalence *e*mptiness-mass or energy.

From the previous fact, the study of the relation emptiness-energy proposes some varied consequences bearing its development to the special relativity by assuring the constancy of light velocity with independence of reference system movement and others. So, it might relate to general relativity with elementary particles that shape the matter across the relation of the space curvature with the Planck magnitudes "space, time and mass" which can make that electrical charge and mass properties appear quantized as a consequence of spherical curvature because of an existing conflict between a force with constant value " $F_{1=c^{4}/G}$ " and another with electrostatic property " $f(q_{U},\lambda)$ " ^[1]. Both inherent to emptiness. 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 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 curvature of emptiness, 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, *w*hich 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", flat emptiness, free of curvature.

When approaching this theory, it is curious that the constants " G,ε,μ ", 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 emptiness is transformed in elementary particles masses 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 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 *u*nthinking and univocal creation of its fundamental and observable 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: a flat emptiness.

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 or 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 paper can imply a destructive enthymeme, 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 term. 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.

 $q_U = \sqrt{(4\pi hv(\varepsilon_o/\mu_o))} [cb]. r = q^2/(4\pi\varepsilon_o mc^2).$ Compton wavelength, λ . [1] $e = q_U \sqrt{(r/\lambda)}$ quantized. $F_1 = F_U = c^4 / G;$ $m = m_p \sqrt{(F_2/F_1)}$ quantized. Planck mass, m_p. $F_2 = Fe = f(q_U, \lambda).$

REFERENCES

www.gonzaloamoreno.com