



Contribution ID: 84

Type: poster

Calculation of gravitational constant in line with Wheeler idea on gravitation

Wednesday, 20 February 2019 18:05 (1 minute)

It is widely accepted that the general theory of relativity ceases to explain phenomena in the vicinity and inside a black hole. Wheeler holds the idea that on the surface of a Black hole the space parameters turn into quantum foam. He even contemplates on the geometry of space parameters as one zooms down on a point particle. In this work we aim to solve challenges by employing a pair of spacetime parameters of a quantum character. We call these of quantum character because they are not experimentally measurable but provide a very useful relations between different physical quantities. This pair of spacetime parameters are linked together through the limiting quantity of space: the Planck length. The realization of the idea of Wheeler helps to achieve a beautiful connection between gravitation and electromagnetism, an effort on which Einstein worked for around 40 years. These steps respect the hierarchy of the physical quantities of energy, momentum and force. This approach respects the idea of Einstein who searched for a theory that had the concepts of the energy –or the field –at its center. The space parameters are derived from a simple relation and are valid for the whole range of masses, from the mass of the electron to the mass of the Universe. From this relation the gravitational constant, and the electrostatic force are derived.

Summary

Primary author: UKA, Arban (Epoka University)

Co-author: Mr NAZARKO, Shpetim (MC2)

Presenter: UKA, Arban (Epoka University)

Session Classification: Poster session

Track Classification: Beyond Einstein's Gravity