

Science of the Cosmos

Contribution ID: 19

Type: not specified

## The Dynamic Formation of Dimensions in the Inner Levels of Time under the Single Monad Model & Duality of Time Theory

Based on the Duality of Time hypothesis and the Re-Creation Principle of the Single Monad Model, a dynamic and self-contained space-time is introduced and investigated. It is shown that the resulting physical vacuum is granular, fractal, hyperbolic and genuinely complex, with real (inner) and imaginary (outer) levels of time. This complex-time space is reduced to the non-Euclidean space-time continuum of General Relativity when we ignore the perpetual re-creation of spatial dimensions in the inner levels of time. Therefore, it will be shown that the three principles of Relativity are derived directly from the Duality of Time Theory, in addition to the principle of re-creation that is necessary and sufficient to obtain exact mathematical derivation of the equivalence between gravitational and inertial masses, as well as the mass-energy equivalence relation (E=mc2), starting from the classical principles. This sequential re-creation in the inner levels of time is also crucial to realize the discrete symmetry of spatial geometry and its instantaneous breaking. Many of the major persisting problems in physics and cosmology will be passingly inspected to demonstrate how they can be easily resolved, or simply cease, in the light of this innovative cosmological model, including the arrow-of-time, non-locality, homogeneity, supersymmetry, matter-antimatter asymmetry, mass generation and the hierarchy of fundamental interactions. Additionally, it will be also shown that the resulting dynamic formation of spatial dimensions will diminish the cosmological constant discrepancy by at least 117 orders of magnitude.

Author: HAJ YOUSEF, Mohamed (UAE University)

Presenter: HAJ YOUSEF, Mohamed (UAE University)