

2ND EUROPEAN PHYSICS CONGRESS

May 20-21, 2019 | Berlin, Germany

The unified field 4-dimensional relativistic Dirac equation

Wim Vegt

Technical University Eindhoven, Netherlands

Albert Einstein, Lorentz and Minkowski together published in 1905 the Theory of Special Relativity and Einstein published in 1915 his Unified Field Theory of General Relativity based on a curved 4-dimensional Space-Time Continuum to integrate the gravitational field and the electromagnetic field in one Unified Field Theory. Since then the method of Einstein's Unifying Field Theory has been developed by many others in more than 4 dimensions resulting finally in the well-known 10-dimensional and 11-dimensional "string theory". The original Kaluza-Klein theory was one of the first attempts to create a unified field theory. After many years of research, the 11-dimensional Super String Theory did not lead to the fundamental answers on the fundamental questions in Physics. Why do elementary particles have the exact numbers for mass, charge and spin. To find answers a new path in Physics has been chosen. A path that has been based on a fundamental property in our universe. The fundamental property of equilibrium. The whole Universe is in a perfect

Equilibrium. This fundamental property of Equilibrium has been extended to a 4-dimensional Hyperspace Continuum in which a perfect equilibrium persists in any of the 4 coordinate directions. The requirement of a 4-dimensional Equilibrium results in the outcome that the Dirac Equation is only one equation in a set of 4 equations. And that the Dirac Equation originates from an electromagnetic equation in the time-energy domain. This new 4-Dimensional Hyperspace Equilibrium Theory opens a new door to an unexplored field of mathematical and physical challenges. This theory is a new approach in physics based on a 4-Dimensional Hyperspace Equilibrium resulting in the 4-dimensional Dirac Equation. Solving these 4 simultaneous equations requires an immense computer performance and offers the possibilities to find the answers to the fundamental questions in physics within a quantum mechanical 4-Dimensional Frame-Work.

j.w.vegt@topuniversities.center