

Foreword

The book “Basic Structures of Matter – Supergravitation Unified Theory” is one original attempt to provide a view on some relations among the fundamental laws in Nature. It is different from the other unified theories and hypothesis by using an approach in which the formulated initial framework and all theoretical analysis of the models are in real three-dimensional space with unidirectional time. In such approach, the principle of causality (the cause precedes the effect) is preserved, valid also for quantum phenomena without uncertainty principle, which facilitates the logical understanding. This leads to an interesting interpretation of some Quantum Mechanical phenomena for which the human logic appeared inadequate. At first glance, the presented theory supports the existence of material Ether, but the proposed original model is not in conflict with the relativistic phenomena. It is based on the initial assumption that at the Planck’s scale of the microcosmos there are two fundamental particles of indestructible super-dense matter, which in a pure empty space environment (a space without any physical properties) interact by forces inverse proportional to the cube of the distance. While this forms the initial framework of the theory, the modeling and the analysis lead to interesting results in the field of microcosmos - the elementary particles might contain a geometrical structure of super-dense matter. The author extends the analysis through formation of atoms and molecules and he proposes an interesting hypothetical scenario for cosmological processes in the Universe. Using the suggested fundamental particles, he provides also a model of a hypothetical underlying structure of the physical vacuum, which has features of quantum space and space-time properties. The proposed structure allows the existence and propagation of fields, which the author identifies as gravitational, electrical and magnetic. From the point of view of the derived physical models, the author provides reinterpretation of experiments and observations from different fields of physics and he makes conclusions and predictions, the further examination of which is quite reasonable.



Prof. Asparuh Petrakiev
Dr. of Science in Physics
PhD in Chemistry
Academician of International Academy of Ecology and Life Protection Sciences,
St. Petersburg, Russia