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Review of the unitary Quantum field theory**Leo Georgy Sapogin***Leningrad State University, Russia*

This report describes a model of Unitary Quantum Field theory where the particle is represented as a wave packet. The frequency dispersion equation is chosen so that the packet periodically appears and disappears without form changings. The envelope of the process is identified with a conventional wave function. Equation of such a field is nonlinear and relativistically invariant. With proper adjustments, they are reduced to Dirac, Schrödinger and Hamilton-Jacobi equations. A number of new experimental effects have been predicted both for high and low energies. Fine structure constant ($1/137$) was determined in 1988, masses of numerous elementary particles starting from electron were evaluated in 2007 with accuracy less than 1 %, 2 pentaquarks, θ^+ -barion, Higgs boson and particle 28 GeV were discovered 11 years later, all of them were evaluated with high accuracy before.

Biography

Sapogin Leo Georgy (1936). Professor Sapogin now lives in Moscow, Russia. He began in 1954 to study in Taganrog Radio-technical University and graduated (Dept. of solid state physics) in 1959. He served during his military service from 1959 to 1972 at Ministry of Defence as the scientific adviser. Candidate of science (1966). He maintained (1971) the doctor degree in Leningrad State University. In 1972 to 1985, he was the Head of Theoretical Department in Russia Academy of Science. Since 1985 till present he is the Head of Physical Department of Technical University – MADI. He is the author (or coauthor) of numerous (over 200) published scientific articles, 4 books, school supplies. He obtained (with V.Boichenko), first, very important scientific result: calculating (with accuracy more 0.3%) of the electrical electron charge and of the fine structure constant $-1/137$. He published (2015) in USA and Russia (together with Prof. Yu.Ryabov and V.Boichenko) the book named "Unitary Quantum Theory and New Source of Energy". Together with Ryabov he calculated mass spectrum of elementary particles and mass bozon Higgs - 131.7 GeV. Professor L.Sapogin - academic of Russian Academy of Natural Science and World Academy of Complex Safety. His biography is included in collection books of «Who's Who in the World» (2006), of International Biographic Centre, Cambridge (2009) and of American Biographical Inst. (2009).