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Particle Physics as Systems Theory

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Abstract

New method, *Systemic Intuition*, reveals: (1) there are two fundamental particles – virtual electron and positron; their interaction gives birth to virtual positronium characterized by energy; positroniums exchange photons and acquire states (composiums) with complex energy; (2) there exists ether consisting of composiums and described by correlation function; (3) ether generates spontaneously mesons and neutrons; cosmic rays are its proper radiation; their data enabled us to evaluate characteristics of ether and dimensions of particles; radius of real electron about 0.01 fm; (4) neutron is linear system with continuously distributed parameters; (5) H-atom is linear system with lumped parameters; it consists of three quarks described by real symmetric matrices; their agents correspond to gluons; (6) essence of nuclear interaction is conservation of energy by transformation of electric energy to magnetic one and vice versa in atoms of deuterium (D-atom); (7) all atoms can be modeled by electric *RLC*-circuits; (8) excited by photons, atoms and neutrons respond with neutrinos; (9) nuclear structure evolves by shells consisting of D-atoms; there are He-shell (2-shell), octahedral shell (8-shell), icosahedral shell (18-shell), double-icosahedral shell (36-shell) and three inverse shells of 18, 8 and 2 D-atoms; additional neutrons perform inter-shell interaction; (10) structure of U-atom is exposition of implicit structure of H-atom; (11) whole theory is actually General System Theory; its abstraction makes it possible to reform any fundamental science, including humanities, into true science, *reform science*; that is shown by reforming politics into true fundamental science, *geopolitics*; (12) theory paves way to settling present general ideological crisis, reforming modern society.

Key words: systemic intuition, ether, spontaneous generation of particles, nuclear interaction, nuclear structure, electric model of atom, General System Theory, reform science

Image from work [1]

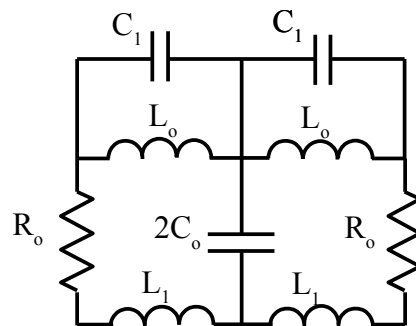


Fig. 5.9 Exact model of the He-atom

Recent Publications:

1. Igor S. Makarov (2015) A Theory of Ether, Particles and Atoms. Online: <http://kvisit.com/S2uuZAAQ>.
2. Igor S. Makarov (2015) Introduction to Theoretical Astrophysics. Online: <http://kvisit.com/SoPadAw>.
3. Igor S. Makarov (2015) Reform of Modern Science. Politics. Economics Online: http://kvisit.com/So_rUAAQ.
4. Socialist Manifesto (2016): <http://kvisit.com/S7pn0Aw>.
5. Igor S. Makarov (2017) Marxism-21. Online: <http://kvisit.com/Sztq9Aw>.

Biography:

Igor Stepanovich Makarov, b. 18.08,1935, Moscow (Russia); Moscow Institute of Communications, 1958; postgraduate course, 1960-1963; degree Candidate of Science in Communications, 1964. Leading Engineer, Senior Researcher, Research Institute of Radio, Moscow, 1964-1984. Immigration in Israel, 1992. In 60s, I started my independent research in Systems Theory, which involved Theoretical Physics, Philosophy with new method in physics. Four parts of research were published in Indian Journal of Theoretical Physics, 1996-2005. In 2007, in Britain, with two new chapters, I printed whole research as book, "*A Theory of Ether, Particles and Atoms*", distributing it to Libraries, Embassies, Academies of Western countries; in 2008 registered it at Copyright Office. In March 2009 I printed its corrected edition; in November 2009 visited Amsterdam, mailing dozens of its copies to universities, scientific centers. I undertook numerous moves to report my works; in May 2018 reported the method at ATINER (Greece) philosophy conference. My CV: <http://kvisit.com/SIZHRAQ>.

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