LETTERS TO PROGRESS IN PHYSICS

Florentin Smarandache: A Celebration

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We celebrate Prof. Florentin Smarandache, the Associate Editor and co-founder of *Progress in Physics* who is a prominent mathematician of the 20th/21th centuries. Prof. Smarandache is most known as the founder of neutrosophic logic, which is a modern extension of fuzzy logics by introducing the neutralities and denials (such as "neutral A" and "non-A" between "A" and "anti-A"). He is also known due to his many discoveries in the filed of pure mathematics such as number theory, set theory, functions, etc. (see many items connected with his name in *CRC Encyclopedia of Mathematics*). As a multi-talented person, Prof. Smarandache is also known due to his achievements in the other fields of science, and also as a poet and writer. He still work in science, and continues his creative research activity.

Florentin Smarandache (born on December 10, 1954) — polymath, professor of mathematics, scientist, poet and writer (originally writting in Romanian, French, and English). He is a US citizen. He lives in the United States.

Florentin Smarandache was born in Bălceşti, a small village in province Vâlcea, Romania. His ancestors from father's side came to Romania from Greece, several generations before, but saved their Greek family name (which was romanized) over the centuries. He was the only child in the family.

In 1979, Florentin Smarandache was graduated from the Department of Mathematics at the University of Craiova (Romania). In 1997, the State University of Moldova at Kishinev bestowed upon him the PhD degree in mathematics. Then he continued his post-doctoral studies at various American Universities (such as University of Texas at Austin, University of Phoenix, etc.).

In the USA he worked as a software engineer for Honeywell (1990-1995), then as Adjunct Professor for Pima Community College (1995-1997). In 1997 he joined to the University of New Mexico, Gallup Campus, as Adjunct Professor. Then he was promoted to Associate Professor of Mathematics (2003), and to Full Professor (2008). During 2007-2009 he was the Chair of Department of Mathematics and Sciences.

During Ceausescu's dictatorship in Romania, Florentin Smarandache was enrolled into a conflict with the Romanian authorities. In 1986 he claimed a hungry strike for being refused to attend the International Congress of Mathematicians at the University of Berkeley. Then he published an open letter in the Notices of the American Mathematical Society, for the freedom of circulating of scientists. He thus became a political dissident in Romania. As a consequence, he was faired from the academic job, and survived during two years from private tutorship. Dr. Olof G. Tandberg, Foreign Secretary of Swedish Royal Academy, supported him by phone talking from Bucharest.

Not being allowed to publish, he tried to get his manuscripts out of the country through the French School of Bucharest and tourists, but for many of them he lost track. Finally, in September 1988, Florentin Smarandache escaped from Romania, then stayed for almost two years in Turkey, in a refugee camp. Here he kept in touch with the French Cultural Institutes that facilitated him the access to books and rencontres with personalities. Before leaving the country he buried some of his manuscripts in a metal box in his parents vineyard, near a peach tree, that he retrieved four years later, after the 1989 Revolution, when he returned for the first time to his native country. Other manuscripts, that he tried to mail to a translator in France, were confiscated by the secret police and never returned. He wrote hundreds of pages of the diaries about his life under the Romanian dictatorship, about

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his being as a cooperative teacher in Morocco ("Professor in Africa", 1999), in the Turkish refugee camp ("Escaped... Diary From the Refugee Camp", vol.1, vol.2, 1994, 1998). In March 1990, Florentin Smarandache emigrated to the United States.

Florentin Smarandache is also known as the founder of "paradoxism" (established in 1980). This is the literary movement which has many followers in the world. Paradoxism is based on an excessive use of antitheses, antinomies, contradictions, paradoxes in creation paradoxes — both at the small level and the entire level of the work — making an interesting connection between mathematics, philosophy, and literature. He introduced paradoxist distiches, tautologic distiches, and dualistic distiches, which were inspired by the mathematical logic. The literary experiments were realized by him in the dramas: "Country of the Animals", "An Upside-Down World", "MetaHistory", "Formation of the New Man", and the others. Florentin Smarandache did many poetical experiments in the framework of his avant-garde. He published paradoxist manifestos: "Le Sens du Non-Sens" (1983), "Antichambres, Antipoésies, Bizarreries" (1984, 1989), "NonPoems" (1990), where he changed the French and respectively English linguistics clichés. While "Paradoxist Distiches" (1998) introduces new species of poetry with fixed form. Eventually he edited three International Anthologies on Paradoxism (2000-2004) with texts from about 350 writers from around the world in many languages. Twelve books were published that analyze his literary creation, including "Paradoxism's Aesthetics" by Titu Popescu (1995), and "Paradoxism and Postmodernism" by Ion Soare (2000).

Florentin Smarandache is also known as an artist working in the style of modernism. His experimental art albums comprises over-paintings, non-paintings, anti-drawings, superphotos, foreseen with a manifesto: "Ultra-Modernism?" and "Anti-manifesto".

In mathematics Prof. Smarandache introduced the degree of negation of an axiom or of a theorem in geometry: Smarandache geometries (1969), which can be partially Euclidean and partially non-Euclidean. He also introduced multi-structures (Smarandache n-structures, where a weak structure contains an island of a stronger structure), and multi-spaces (a combination of heterogeneous spaces). He introduced and developed many sequences and functions in number theory. Florentin Smarandache also generalized fuzzy logics to "nueutrosophic logic" and, similarly, he generalized fuzzy set to "neutrosophic set". Also, he suggested an extension of the classical probability and imprecise probability to "neutrosophic probability". Together with Dr. Jean Dezert (ONERA, France), he generalized Dempster-Shafer theory to a new theory of plausible and paradoxist fusion, which is now known as Dezert-Smarandache theory (2002). In 2004 he designed an algorithm for the unification of fusion theories (UFT) used in bioinformatics, robotics, and military.

In physics, Prof. Smarandache introduced a series of paradoxes (quantum Smarandache paradoxes). On the basis of neutrosophic logics, he also considered a theoretical possibility of a third form of matter, called as unmatter, which is a combination of matter and antimatter (2010). Based on his early 1972 publication (when he was a student in Romania), Prof. Smarandache suggested the hypothesis that "there is no speed barrier in the universe and one can construct any speed". This hypothesis was partially validated on September 22, 2011, when researchers at CERN experimentally proved that the muon neutrino particles travel with a speed greater than the speed of light. Upon his hypothesis he suggested a modification of Einstein's theory of relativity, where the relativistic paradoxes are only the observable effects registered by a particular observer, not the true reality. The speed of light in vacuum is thus considered to be a variable value, which is dependent on the type of synchronization of the particular observer. It is a constant for only the observer who uses light beams as the medium of synchronization. Therefore, the cosmological redshift and the other relativistic effects are true only for the social community of the observers whose picture of the world is "painted" on the basis of information obtained from the light signals.

In philosophy, Florentin Smarandache introduced neutrosophy (1995), which is a new generalization of Hegel's dialectic. Neutrosophy has a basis in his researches in mathematics and economics, such as "neutrosophic logic", "neutrosophic set", "neutrosophic probability", and "neutrosophic statistics". Neutrosophy is a new branch of philosophy that studies the origin, nature, and scope of neutralities, as well as their interactions with different ideational spectra. This theory considers every notion or an idea <A> together with its opposite or negation <Anti-A> and the spectrum of "neutralities" <Neut-A>. The <Neut-A> and <Anti-A> ideas together are referred to as <Non-A>. According to this theory every idea <A> tends to be neutralized and balanced by <Anti-A> and <Non-A> ideas as the state of equilibrium.

International Conference on Neutrosophy and Neutrosophic Logics was held in December 2001 at the University of New Mexico, USA. International Conference on Smarandache Type Notions in Number Theory was held in August 1997 at University of Craiova, Romania. International Conference on Smarandache Geometries was held in May 2003 at Griffith University in Queensland, Australia.International Conference on Smarandache Algebraic Structures was held in December 2004 at Loyola College in Madras, India.

Prof. Smarandache authored numeous monographs, and about 200 research papers published in about 50 scientific journals. He also was the editor of more than a hundred of scientific books authored by the other scientists. In addition to his scientific research, Prof. Smarandache gives lectures throughout the world for over many years. He was an invited lecturer at Bloomsburg University (USA, 1995), University of Berkeley (USA, 2003), NASA Langley Research Center (USA, 2004), Jadavpur University (India, 2004), NATO Ad-

vanced Studies Institute (Bulgaria, 2005), Institute of Biophysics (Russia, 2005), University Sekolah Tinggi Informatika and University Kristen Satya Wacana Salatiga (Indonesia, 2006), Minufiya University (Egypt, 2007), Universitatea din Craiova (Romania, (2009), Air Force Research Lab and Griffiss Institute (USA, 2009), Air Force Institute of Technology at Wright-Patterson AFB (USA, 2009), Air Force Research Lab of State University of NY Institute of Technology in Rome (NY, USA, 2009), COGIS (France, 2009), ENSIETA — National Superior School of Engineers and Study of Armament in Brest (France, 2010), Institute of Solid Mechanics and Commission of Acoustics (Romania, 2011), Guangdong University of Technology in Guangzhou (China, 2012), Okayama University (Japan, 2013), etc.

In 2011, Academia DacoRomana in Bucharest bestowed upon Prof. Smarandache the Doctor Honoris Causa degree. In the same year, Beijing Jiaotong University in China bestowed the Doctor Honoris Causa degree upon him as well.

We all, who know Prof Florentin Smarandache closely over decades, point out his benignity, enthusiasm, and scientific creativity. He never rests in mind, but always works on different fields of science, literature, and art. We wish him to be always full of energy, pink health, and to have happy life for many years.

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