Abstract Submitted
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Neutrosophic Physics as a new field of research FLORENTIN SMARANDACHE, University of New Mexico — Neutrosophic Physics describes collections of objects or states that are individually characterized by opposite properties, or are characterized neither by a property nor by the opposite of that property. Neutrosophic Physics means a mixture of physical concepts/ideas/spaces/laws/theories <A> with their opposite <antiA> or with their neutral <neutA> {where <neutA> means neither <A> nor <antiA>, but in between, i.e. the neutral part}, and it is a combination of heterogeneous contradictory things which hold together. There are many cases in scientific fields (and in humanistic fields) that an item <A> and its opposite <antiA> or their neutral <neutA> are simultaneously valid. - Several examples of neutrosophic physics: (1) unmatter, which is formed by matter and antimatter that bind together (Smarandache, 2004); (2) neutral Kaon, which is a pion & anti-pion composite (Santilli, 1978) and therefore a form of unmatter; (3) neutrosophic cosmological model (Rabounski-Borissova, 2011); (4) among possible Dark Matter candidates there may be exotic particles that are neither Dirac nor Majorana fermions; (5) mercury (Hg) is a state that is neither liquid nor solid under normal conditions at room temperature; (6) non-magnetic materials are neither ferromagnetic nor anti-ferromagnetic; (7) quark gluon plasma (QGP) is a phase formed by quasi-free quarks and gluons that behaves neither like a conventional plasma nor as an ordinary liquid; (8) neutrosophic methods in General Relativity (Rabounski-Smarandache-Borissova, 2005); (9) neutrosophic cosmological model (Rabounski-Borissova, 2011); etc.

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