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LIFTING OF THE GALILEI AND POINCARE SYMMETRIES UNDER CONVERSION OF LINEAR INTO ANGULAR MOMENTA AND THE APPARENT LACK OF NEED OF NEUTRINOS

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Abstract

We review the origin of the neutrino hypothesis, the subsequent hypothesis of neutrino oscillations due to problems of the former hypothesis, and the lack of convincing experimental evidence on the existence of at least one out of the large variety of conjectured neutrinos. We then show that the neutrino hypothesis originates in the point-like abstraction of hadrons and that neutrinos do not appear to be needed when hadrons are represented as they are in the physical reality, that is, as extended, deformable and hyperdense particles. We show in particular that conservation laws can indeed be verified, not within the context of Keplerian systems (such as planetary and atomic systems), but for more general non-Keplerian systems as occurring in interior dynamical problems (such as the structure of a planet or of a hadron). In fact, the latter systems admit interchanges of linear and angular momenta (also visible via a telescope in Jupiter's structure) representable via the isotopies of the Galilei and Poincar\'e symmetries. These interchanges permit the representation of spins in the neutron synthesis as well as in weak interactions at large without any need of neutrinos. The exact, numerical and invariant representation of all other characteristics of the neutron synthesis without neutrinos is then permitted by the isorepresentations of hadronic mechanics. We conclude with the indication that the lack of existence of neutrinos permits quantitative studies of the utilization of the immense, inexhaustible and clean energy contained in the neutron, thus requesting
serious consideration.