

Acceleration field-force under the density field model

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The density field model known as Chameleon Cosmology allows for variation in the gravitational field-force on static or motionless objects that change with the local density field. Here it is shown that an acceleration field-force exist on an object regardless of the local density field when the object is non-static or in motion. The acceleration field-force arises from acceleration of the object or the acceleration of its particulate matter comprising an internal accelerated density field. When the internal density field is accelerated, a time variance exists between an object's internal density field and its actual density that produces a phase in the field-force coupling to produce an acceleration field-force on the object. The phase derivation uses a concept known to electrical engineers as "Time Dilation and Retardation" to describe the time variance on the object as a phase due to changes in the object's density field from its actual density. From this, phased acceleration field-force equations for objects in motion with accelerated internal particulate matter are developed. The phased acceleration field-force equations are shown to predict the thrust on a solid rocket motor.

Biography

Robertson holds a B.S. in Physics and Mathematics; University of North Alabama and a MS in Operations Research; University of Alabama in Huntsville. He has 25+ years of service performing research and development tasks for the NASA - Marshall Space Flight Center as an Aerospace Technologist. In 2008, as an outside NASA activity, he formed the not-for-profit "Institute for Advanced Studies in the Space, Propulsion & Energy Sciences (IASSPES)." Editor: *Space, Propulsion & Energy Sciences International Forum*, held from 2009-2011. Book: *Gravity-Superconductor Interactions: Theory and Experiment*, Editors - Giovanni Modanese and Glen A. Robertson, Bentham Books, 2012.

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