

# STOE explains “Planet 9”

John C. Hodge<sup>1\*</sup>

<sup>1</sup>Retired, 477 Mincey Rd., Franklin, NC, 28734

## Abstract

Planet 9 is a hypothetical mass in the Kuiper Belt that causes the trans-Neptunian bodies to have unexplained orbits. The Scalar Theory of Everything (STOE) suggests the rotation curve anomalies of spiral galaxies, the Pioneer Anomaly, and the hypothetical Planet 9 phenomena are linked by a common cause, another application of the STOE Universal Equation.

Theory of Everything, STOE, Planet 9.

## 1 INTRODUCTION

Discrepancies in the orbits of Uranus, Neptune, and trans-Neptunian bodies began to be noticed in 1846. A model to explain these orbits remains elusive. Recently, a “Planet 9” hypothesis has been advanced and a search begun to find it (Batygin et al. 2019). Planet 9 is a hypothetical mass in the Kuiper Belt that attracts the trans-Neptunian bodies. The Batygin team suggests Planet 9 is in the general direction of Orion (Wikipedia 2019).

The Scalar Theory of Everything (STOE) suggests the non-Keplerian, rotation curve observations of spiral galaxies are the result of an outward force of a plenum Sourced from the center of spiral galaxies (Hodge 2006a). The STOE model applied a single “Universal Equation” successfully to calculate and compare the rotation curves to actual observations (Hodge 2018). The standard models of cosmology hypothesize Dark Matter causes these rotation curves anomalies. Despite large expenditure, the hypothetical Dark Matter remains elusive.

The STOE was also applied successfully to calculate and compare all 12 of the Pioneer Anomaly’s observations compared to only one observation by the physics community, accepted model (Hodge 2006b). The Universal Equation was applied to galaxy redshift and then to the Pioneer anomaly for solar system conditions. The planets provide a Sink for the plenum that originates at the center of the Milky Way galaxy. The discussion noted that the Sagittarius A\* plenum effect ( $a_{Pgal}$  in the paper) becomes noticeable to cause orbital effects near the orbit of Pluto.

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\*E-mail: jchodge@frontier.com

The outward plenum force exerted on masses/planets is radial from Sagittarius A\*. This force appears to be directed toward Orion from Earth. Therefore, the STOE explains the anomalous orbits of trans-Neptunian bodies similar to the STOE explanation of spiral galaxy rotation curves.

## References

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