

STOE beginnings

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Abstract

The Scalar Theory Of Everything (STOE) was started from these initial considerations about the organization of the universe.

Theory of Everything, STOE.

1 INTRODUCTION

A physics model such as the Scalar Theory of Everything (STOE) has to start from some initial considerations.

We exist in a universe. Our senses have helped us use the resources of the universe to survive. Instruments help us discover universe characteristics our senses don't detect. Science is the study (humanity's method of problem solving) of the universe characteristics. Religion is another method of solving humanity's survival problem by creating morals to follow by a trial-and-error method. Science uses PREDICTION and USEFULNESS to determine science models which are confirmed by observations.

We expand our models outward from what we can directly observe to include more observations. The current challenge is to find a model of the big of cosmology and the small of light and the quantum world. Going farther than where we can observe or model with testable hypothesis is metaphysics which is largely useless because there will be no observations without simpler models to serve as a base. For example, statements concerning other universes are useless.

A fundamental principle is in the form of "If and only if all the systems we observe in our universe have property x , then the universe has property x ". Examples include x = have a beginning; x = have an end; x =are bounded; x =have sources; x = have sinks; x =are finite; x =are part of a feedback system; x = are continuous or discrete; x action is by direct contact; x =entities interact; x =fractal structure; etc. Although our experience suggests otherwise, concepts such as "beauty", "elegance", "graceful", etc. in our eyes are not necessarily throughout the universe. The universe has a feedback loop (an x) (Hodge 2006), therefore feedback and the implied fine tuning are present in the systems of the universe.

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The minimum number of components of the universe needed to describe our observations is two. One is insufficient because an interaction (an x) is necessary to describe the variability (the continuous and discrete characteristics).

The next step is to describe the properties of the two components and how they interact to emerge into the entities and events we observe. This is done by examining observations and forming a model. The need for interaction is another reason for two components rather than one.

Because of the fractal or self-similar characteristic of the universe, “proof-by-analogy” is the preferred method of modeling. “Proof-by-logic” can be used to fill in the gaps that usually requires math. However, there are many characteristics that are unapproachable with proof-by-logic (math) such as vortices. Further, the choice of extending models to form predictions has many pitfalls such as linear regression frequently fails. Prediction with “proof-by-analogy” is simple - follow the analogy already present in the universe. Models treat many more effects outside our current ability to measure. Logic requires a starting set of assumptions that may have no resemblance to the physical universe.

The Scalar Theory of Everything (STOE) model suggests the two components of the universe are hods that are particles and plenum that is continuous. The STOE model provides a link with General Relativity - hods (matter) warps the plenum (“space”, gravitational ether, etc.) and plenum directs hods (matter) (Hodge 2018).

The STOE model also provides a link between the classical world and the quantum world. The STOE model assumes waves in the plenum behave as observed in the Newtonian classical world (Hodge 2012).

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References

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