AAAS-PD PRESENTATION CHARTS--

FUNDAMENTALLY ANISOTROPIC LIGHT-VELOCITY AT THE FOUNDATION OF CLASSICAL PHYSICS

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Probably the most recognized principle at the foundation of Einstein's special relativity (1905) is isotropic light-speed—i.e., c=constant, irrespective of relative velocity between observer and the experimental apparatus (e.g., the Michelson-Morley setup). But is light-speed truly isotropic...and here we may keep in mind that Einstein himself allowed that the principle was a *stipulation*, rather than fundamental. (Einstein referred to the subject several times, beginning with his 1905 paper. A good overview is given by Selleri in "Recovering the Lorentz ether" (2004): "2. Conventional simultaneity".)

In fact, the c=constant "principle" is a special case—where the reader is referred to Rizzi et al. (2008) for an exhaustive treatise on the matter—a special case that greatly simplifies the mathematics (of the Maxwell equations, for example…see Rizzi et al. Appendix A,2) while encompassing space-time physics at the time, as did general

relativity ten years later. Anisotropic light-speed by itself does not provide measureable empirical traction. But when we recognize singular anisotropic light-speed in conjunction with the Hubble expansion such traction does emerge. This is the subject of the next technical presentation at the AAAS-PD San Diego conference in 2016.

Our interest now turns to the charts shown at the 2015 conference in San Francisco, which charts, as a primary intent, demonstrated the multi-state character of physical reality within the classical perspective (which I understand to include special and general relativity). Chart #4 (Schrodinger's Cat---Dead and Alive) may be considered the core of the talk, with the two preceding charts addressing relevant coordinate transformations. This condition in classical theory follows from Einstein's dual synchronization methods: a) synchronization via light-pulses (1905); and b) synchronization via same-motion acceleration (1907). At the end of synchronization 'b', repeat of synchronization 'a' immediately exhibits the multi-state character (two states in this case).

While the relativistic theory presented below is not new in its empirical attributes—in other words, there are no new predictions or explanations—its (relativistic) extension for modeling galactic-rotation flattening by accounting for anisotropic light-velocity within the Hubble flow (presented at the 2016 AAAS-PD conference (San Diego)) is significant in that it resolves Newtonian/GRT predictive breakdown without recourse to dark matter.

[AAAS-PD PRESENTATION CHARTS--Anisotropic Light Velocity.pdf]

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