

Abstract Submitted
for the APR18 Meeting of
The American Physical Society

EEExplanation of Cosmic Acceleration and Excessive Spiral Galaxy Rotation Speed by Postulated Unbounded Light-Speed in the Hubble Expansion THOMAS CHAMBERLAIN, Univ of California - Berkeley — Deep MOND and the Baryonic Tully-Fisher Relation show far-field gravitation around spiral galaxies declining inversely with radius while SN-1a supernova distance-measurements point to cosmic acceleration, both phenomena unexplained by general relativity. However, when Einstein's isotropic light-speed is succeeded by more fundamental anisotropic light-speed - specifically, unbounded inward with $c/2$ outward - within Hubble space-expansion a new, outward-reaching time dilation emerges as the basis for explaining cosmic acceleration. Uniting this new time-dilation with Schwarzschild-solution time dilation allows $1/r$ far-field gravitation around spiral galaxies thereby giving a relativistic formulation of Milgrom's Deep MOND. Both advances exhibit the empirical universal acceleration scale $1.2E-10$ m/s^2 and are in accord with the Einstein gravitational effects near the Sun. Combining far-field and Schwarzschild gravity gives cross-over of the two components at near 7,000 AU from the Sun, in agreement with wide-binary data. While special relativity, and therefore general relativity, are revised at the foundation, standard relativity theory has been central in the present deeper development.

Thomas Chamberlain
Univ of California - Berkeley

Date submitted: 30 Jan 2018

Electronic form version 1.4