

Abstract Submitted  
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**On the New Cosmology** C. GREGORY HOOD, Retired — A previously unexplored union of Hubbles law and the relativistic Doppler equation is presented. The resulting equation includes a universal distance, which limits our observable universe to a sphere with a radius of 13.4 billion light-years. Photons, emitted from this distance or beyond, can never reach us. It follows that the galactic photon energy loss - the galactic red shift - is due to a universal constant deceleration. This universal deceleration is related to the constant acceleration used in MOND, and is in the same ballpark as the deceleration experienced by the Pioneer spacecraft. When it is applied to Newtonian solar orbits, the orbits are non-Keplerian, and very much like those found in spiral galaxies. In fact, all classical orbits are now fundamentally non-Keplerian. Since the basic equation does not limit time, time has no history. Thus, the change in approach proposed herein brings with it a new finite cosmology, without expansion, dark energy, and dark matter.

C. Gregory Hood  
Retired

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