

Abstract Submitted
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Surface Brightness Test and Plasma Redshift ARI BRYNJOLFS-
SON, Appl. Rad. Ind. — The plasma redshift of photons in a hot sparse plasma follows from basic axioms of physics. It has no adjustable parameters (arXiv:astro-ph/0406437). Both the distance-redshift relation and the magnitude-redshift relation for supernovae and galaxies are well-defined functions of the average electron densities in intergalactic space. We have previously shown that the predictions of the magnitude-redshift relation in plasma- redshift cosmology match well the observed relations for the type Ia supernovae (SNe). No adjustable parameters such as the time variable “dark energy” and “dark matter” are needed. We have also shown that plasma redshift cosmology predicts well the intensity and black body spectrum of the cosmic microwave background (CMB). Plasma redshift explains also the spectrum below and above the 2.73 K black body CMB, and the X-ray background. In the following, we will show that the good observations and analyses of the relation between surface brightness and redshift for galaxies, as determined by Allan Sandage and Lori M. Lubin in 2001, are well predicted by the plasma redshift. All these relations are inconsistent with cosmic time dilation and the contemporary big-bang cosmology.

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