Abstract Submitted for the MAR12 Meeting of The American Physical Society

Reconsidering Dark Matter SOL AISENBERG, International Technology Group — There is a difference between (a) distances of remote standard candles, SN Type Ia, and (b) distances based upon their red shifts. It was believed that these galaxies had accelerated and used Dark Energy. There are 2 assumptions not supported by observations. The first is that the red shifts for remote galaxies are due to the Doppler Effect associated with receding velocity. Hubble only observed red shifts as a function of distances of known stars, and never measured receding velocities. He suggested the Doppler Effect as a cause, but expressed doubt about the suggestion. There are other causes for a red shift - gravity red shift of light from the sun, and loss of photon energy by gravity interaction of photons with dust and gas in interstellar space. The second assumption is that Hubble's linear relationship between the observed red shift and the distance will be valid at very large distances. Increasing red shift corresponds to a decrease of photon energy towards zero, and cannot be used for very remote stars - where the photon energy approaches zero and the red shift dependence becomes nonlinear and asymptotic to a constant value. This predicts the difference between the galaxy distances and the distances determined from their observed red shifts. The recent Nobel Prize (to Schmidt, Reis, and Perlmutter) needs reexamination. Two basic assumptions that are the foundation of their work may not be accurate. Details are in my earlier essays in "The Misunderstood Universe", © 2009.

> Sol Aisenberg International Technology Group

Date submitted: 20 Oct 2011

Electronic form version 1.4