## Abstract Submitted for the APR05 Meeting of The American Physical Society

Neutrino Redshifts - A Search for Information. 1 CHARLES GALLO, Superconix Inc — Neutrinos will undergo Redshifts due to Doppler and/or Space Expansion effects similar to Electromagnetic Radiation (Photons). However, in some situations (ex., Quasars, etc), Photon Redshifts may be due to cumulative energy-loss mechanisms with the intervening medium. In this situation, the corresponding Neutrino Redshifts will be much smaller since the interaction cross-section for neutrino-medium interactions will be much smaller than any photon-medium cross-section. Thus, observation and comparison of photon redshifts vs corresponding neutrinos redshifts will be very informative. If the photon and neutrino redshifts are similar, then a Doppler and/or Space Expansion interpretation is justified. If the neutrino redshift is much smaller than any corresponding photon redshift, then an interpretation via a cumulative energy-loss mechanism is justified. This is a very definitive experimental test of redshift interpretations. The latest neutrino data will be examined, particularly relevant to quasars and supernova. Reference: "Redshifts of Cosmological Neutrinos as Definitive Experimental Test of Doppler versus Non-Doppler Redshifts" by C. F. Gallo in IEEE Trans. Plasma Science, vol. 31, No. 6, pgs. 1230-1231, Dec. 2003.

<sup>1</sup>Neutrino Redshifts - A Search for Information

Charles Gallo Superconix Inc

Date submitted: 04 Mar 2005 Electronic form version 1.4