

Abstract Submitted  
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**Horizons and Phase Space** RICHARD KRISKE, University of Minnesota — This author has previously suggested that the CMBR may not be entirely due to the generalized Red-Shift, but may be due to the curvature of the Universe in that the time dimensional axis would gradually tilt away from the observer at great distances in the same way that the height dimension tilts away from the observer on the surface of the Earth. There is a well known theory used by navigators that uses Euclidean Geometry to gauge this effect on the surface of the Earth, but when used in 4 space this method lacks the height needed to calculate the distance to the horizon in that the height is the time dimension. A similar height like variable can be found in QED however in the phase that is calculated from the Lagrangian. This author is suggesting that QED needs to be corrected in adding an additional phase that comes about from information conveyed in the wave-function at the time it is created giving it information about the direction of the time dimension which is rotated as the wave function moves and ultimately changes the frequency of the photon. This is field information that resembles current theories.

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