

Abstract Submitted
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The Electroweak Force may be a result of a Horizon of a Curved Universe RICHARD KRISKE, University of Minnesota — This author has previously written that the CMBR may be the result of looking at the Horizon of a curved sphere-like Universe (sphere-like in 3 space dimensions, with one linear time dimension perpendicular to each point on the Sphere). When one looks at the Horizon of a two dimensional surface, such as the Earth, the Horizon is a one dimensional curved line, because objects at a distance, not only shrink, but tilt back away from the observer. In space-time something more dramatic happens, the tilt is in the time dimension so the horizon has a velocity and an acceleration, away from the observer no matter where the observer is located on the surface (with perhaps the exception of black and white holes). It can be seen that this sort of Horizon breaks CPT invariance in that time can only have one direction at the Horizon, since it has to tilt back away from the observer. It may be that this breaking gives rise to masses in particles that would not normally be there if the Universe were flat. These masses would be Universal and would appear to permeate all of Space-Time just as the CMBR does, in essence Curvature gives Energy, but in an unusual way. A way of testing for this phenomena is to look at different sizes of Black Holes, and their Horizons. Different curvatures should change the energies of the Higgs particle, and perhaps the strength of the Electroweak Force.

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