Redshift and Blueshift are due to the Medium Composition

FLORENTIN SMARANDACHE, Univ of New Mexico — The redshift is the shift from shorter wavelengths towards longer wavelengths [or from higher wave frequency to lower wave frequency]. And, reciprocally, the blueshift is the shift from longer wavelengths towards shorter wavelengths [or from lower wave frequency towards higher wave frequency]. The General Theory of Relativity asserts that the redshift and blueshift are entirely due to the Doppler’s Effect, which is caused by the motion of light source: if the source is moving away from the observer the frequency received is lower [redshift], but if the source is moving towards the observer the frequency received is higher [blueshift]. But Doppler’s Effect itself is actually an appearance to a Subjective Observer, because the frequency is the same all over (if one considers the Absolute Observer). We believe that the redshift and blueshift are not entirely due to the Doppler’s Effect, but also due (as in the light bending) to the medium composition (medium that could be formed by waves, particles, plasma, dust, gaseous, fluids, solids, etc.), to the medium density, to the medium heterogeneity, to the medium structure, and to the electromagnetic and gravitational fields contained in that medium that may interfere with the light that passes through.

Florentin Smarandache
Univ of New Mexico

Date submitted: 04 Oct 2016
Electronic form version 1.4