

A New Explanation for Why Vacant Cosmic Regions are Not Empty and Why Occupied Regions May Not Be as They Appear: Utilising Inflation, Redshift, and Blueshift Phenomena in the Universe

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When we observe the cosmos using high-powered telescopes, we notice regions that are densely populated with galaxies, while other vast areas, stretching millions of light-years, appear completely empty. However, if we consider the fundamental principle of Cosmic Inflation, we find that a huge cloud with a radius of approximately 10^{24} (m) was formed after the Big Bang. This event created a uniform expanse of gaseous elements throughout the infinite reaches of space. Essentially, because of the homogeneity of forces, this region developed into a uniform spherical cloud where particles gradually came together to form stars, galaxies, and planets.

Given the uniformity of this primordial cloud—which maintained a consistent density throughout—logic dictates that galaxies and stars should have formed at every point in the inflationary cloud. Consequently, regions that appear "empty" may not truly be vacant. Instead, due to the phenomena of Redshift and Blueshift (High-shift and Low-shift), the luminous spectra emitted by these stars and galaxies may have been altered, rendering visible spectra invisible.

As we know, within the vast electromagnetic spectrum, visible light occupies only a narrow frequency range; it can easily become "lost" within the broader wavelengths. If we imagine the electromagnetic spectrum on the scale of kilometres, visible light would represent only a few metres. Thus, visible light waves can easily disappear through the phenomena of "Low-shift" or "High-shift," taking on the characteristics of infrared or ultraviolet radiation. It stands to reason that in areas lacking visible light, the gravity waves, X-rays, or radio waves we detect are, in fact, the initial visible light waves that have been shifted.

Notice: Occasionally, a telescope's orientation aligns with the Milky Way's moving away axis. If an observer points a telescope towards a region of space receding directly away from our trajectory, the light from galaxies moving in that opposite direction may never reach us (nor will our light reach them). In such instances, we perceive that region of space as lightless or dark.

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