

The redshift explained

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Abstract: In astronomy the big bang is used to explain the redshift. Forever and faster at the edges moving galaxies are topic of discussion. Are they moving towards us or are they moving away from us? The red light must be, because of the doppler effect (wavelength of the light changes when objects move towards or away from the observer) and hubble`s law, that we are witnessing an explosion.

In this paper i am going to explain in very simple graphics and the Wolynski-Taylor diagram what the red shift is, using intensity drop (due to distance) of a very few high intensity (white, yellow) younger stars vs. the low intensity rise due to the huge increase in the detection of older (red) stars.

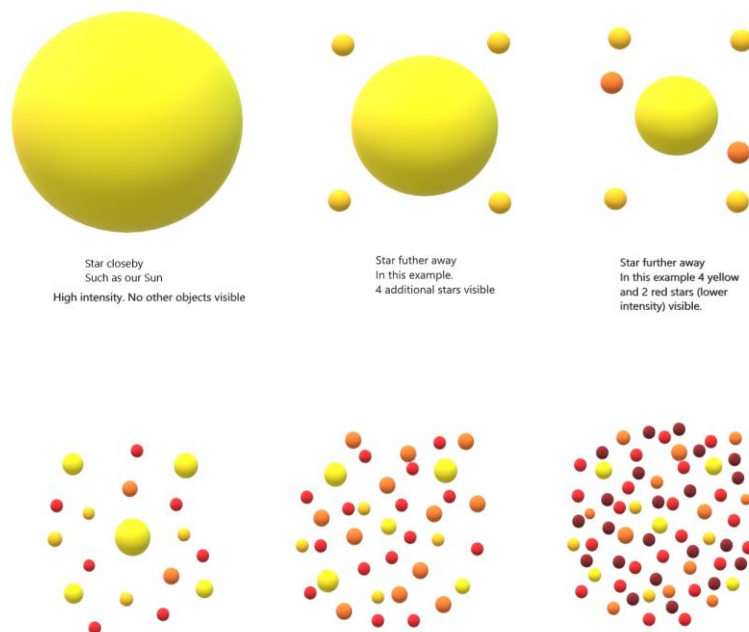


Figure 1. If a high intensity younger star increases its distance to the observer other low emitting older objects become visible. These illustrations can also be applied to galaxies.

Due to the detection level of our astronomical instruments, we will only observe a galaxy as a red blur at the end of our observational universe.

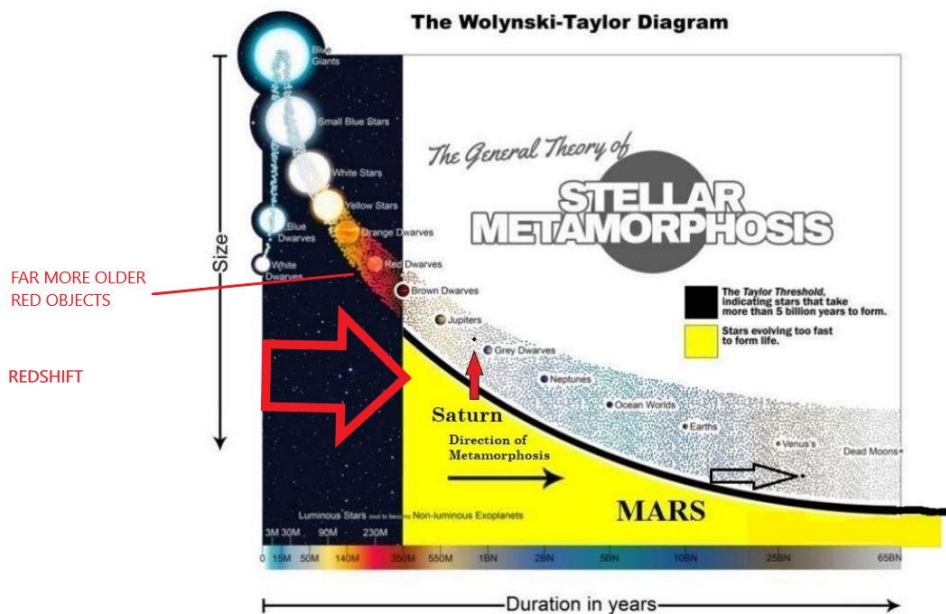


Figure 2. The Wolynski- Taylor diagram indicates there are far more low intensity red/ brown stars than high intensity white/yellow stars in the universe.

Figure 2 does not mean the universe started at the same time everywhere. It means that, at greater distance, the emission spectrum will turn red because older stars inside galaxies become visible.

In special reference to quasar red shift, which is different than this paper, I like to refer to the magnificent work of Halton Arp.

He found new quasars to make a redshift, closely in astronomical term, due to alteration of the matter involved.

His work can be found on youtube.

Ivo.