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Is the Universe really expanding?

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The Hubble law, determined from the distance moduli and redshifts of galaxies, for the past 80 years, has been used as strong evidence for an expanding universe. This claim is reviewed in light of the claimed lack of necessary evidence for time dilation in quasar and gamma-ray burst luminosity variations and other lines of evidence. It is concluded that the observations could be used to describe either a static universe (where the Hubble law results from some as-yet-unknown mechanism) or an expanding universe described by the standard Lambda cold dark matter model. In the latter case, size evolution of galaxies is necessary for agreement with observations. Yet the simple non-expanding Euclidean universe fits most data with the least number of assumptions. From this review it is apparent that there are still many unanswered questions in cosmology and the title question of this paper is still far from being answered.

Comments: 11 pages, 1 Table

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