

Abstract Submitted  
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**Changing universe model of the cosmic microwave background, early type galaxies, redshift, and discrete redshifts** JOHN HODGE, Blue Ridge Community College — Developing the changing universe model (CUM) toward an alternate cosmological model provides motivation to investigate cosmological observations. The black body nature of the CMB is consistent with the CUM. Since the CUM posits the photons are quantized, positing quantum oscillators in the wall of the black body cavity is unnecessary. The CMB temperature and mass content of our universe is controlled by a feedback mechanism. If our universe is stable, the temperature of the CMB radiation should be 2.718 K. The CUM suggests the higher measured CMB temperature indicates an imbalance between energy injection and energy ejection rates of the Sources and Sinks. Several differences among galaxy types suggest that spiral galaxies are Sources and that early type and irregular galaxies are Sinks. The redshift calculation explored previously (SESAPS '04,session GD 15) is improved. Further, the CUM suggests the discrete variations in redshift, reported by W. G. Tifft, 1997, *Astrophys. J.* 485, 465 (and references therein) and confirmed by others, are consistent with the Sink's effect on redshift in clusters. Full text: <http://web.infoave.net/scjh>.

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