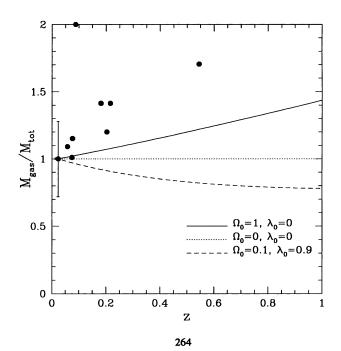# A NEW METHOD TO ESTIMATE COSMOLOGICAL PARAMETERS USING THE BARYON FRACTION OF CLUSTERS OF GALAXIES

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We propose a new method to estimate cosmological parameters using the baryon fraction of clusters of galaxies for a range of redshifts. The basic assumption is that the baryon fraction of clusters is constant, which is a reasonable assumption when it is averaged within a Mpc scale. We find that the baryon fraction vs. redshift diagram can estimate the cosmological parameters, since the derived value of the baryon fraction from observations depends on the adopted value of cosmological parameters through the angular diameter distance (e.g. Sasaki, S. 1996, *PASJ* **48**. L119).