

Gamma-ray bursts as cosmological probes

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We discuss the use of Gamma Ray Bursts as high-redshift distance estimators, and consider their role in the study of two specific dark energy models. The first one, is the so-called the generalized Chaplygin gas model, which allows for the unification of dark energy and dark matter, while the second is the Λ CDM model, a model where a generic dark energy fluid is described by the equation of state, $p = \omega\rho$. We find that as the GRBs redshift range is rather high, it turns out that they are not very sensitive to the dark energy component, being however, a fairly good estimator of the amount of dark matter in the Universe.