

# Constraining a model of dark energy with data

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In this project, the late-time accelerating expansion of the Universe is investigated using the affine equation of state parameter. The numerical results of some observational parameters such as the deceleration parameter, the energy density the equation of state parameter, the age of the universe, and the look-back time will be examined in this model to explain the late time universe. Comparison between  $\Lambda$ CDM and our model will be performed. The best-fit cosmological parameters will be calculated using the MCMC tool, utilizing late-time cosmic measurement data, namely OHD and SNIa data.