



Probing dark energy beyond $z=2$ with CODEX

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Precision measurements of nature's fundamental couplings and a first measurement of the cosmological redshift drift are two of the key targets for future high-resolution ultra-stable spectrographs such as CODEX. Being able to do both gives CODEX a unique advantage, allowing it to probe dynamical dark energy models (by measuring the behavior of their equation of state) deep in the matter era and thereby testing classes of models that would otherwise be difficult to distinguish from the standard Λ CDM paradigm. We illustrate this point with two simple case studies.

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