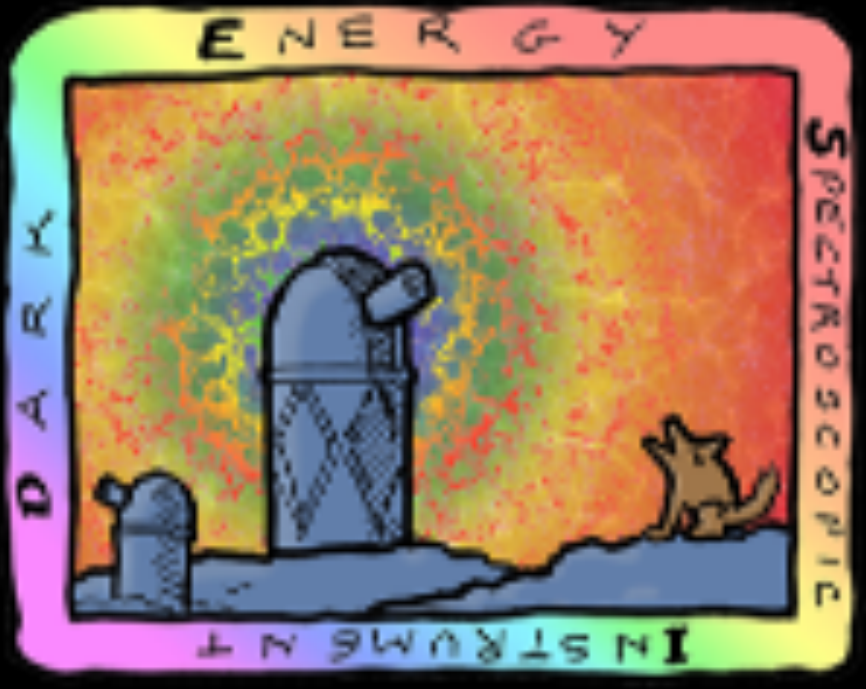


# DARK ENERGY SPECTROSCOPIC INSTRUMENT

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# DESI VI. Cosmological constraints - Aug 2024 XII ICNFP @ Crete, Greece, 2024

# Uendert Andrade (UMichigan)

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# Blind analysis

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# How is the DESI BAO analysis different?

- **Blind analysis** to mitigate observer/confirmation biases (catalogue-level blinding)

Blinding happens in three steps:

1. Blinding for BAO;
2. Blinding for RSD;
3. Blinding for primordial non-Gaussianity $f_{\rm NL}$.

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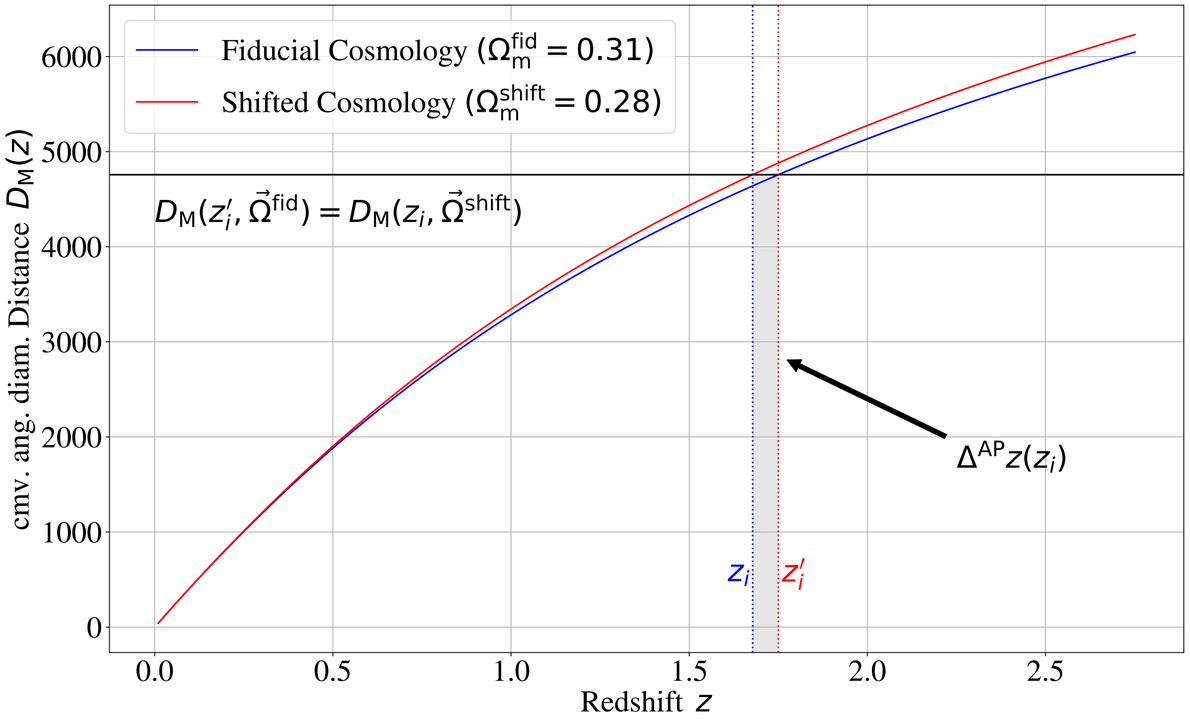
# How is the DESI BAO analysis different?

- **First step**: AP-like shift



S Brieden et al (2020): arXiv:2006.10857

**blind cosmology** $w_0$, $w_a$, $\Omega_m$ (not revealed!)

$$(\text{ra}, \text{dec}, z) \longrightarrow (X, Y, Z)$$

fiducial cosmology

$$(\text{ra}, \text{dec}, z') \longleftarrow (X, Y, Z)$$

$$z_i\,(\Omega_{\text{true}}) \xrightarrow{\Omega_{\text{blind}}} D_M(z_i, \Omega_{\text{blind}}) = D_M(z_i', \Omega_{\text{fid}}) \xrightarrow{\Omega_{\text{fid}}} z_i'\,(\Omega_{\text{blind}})$$