



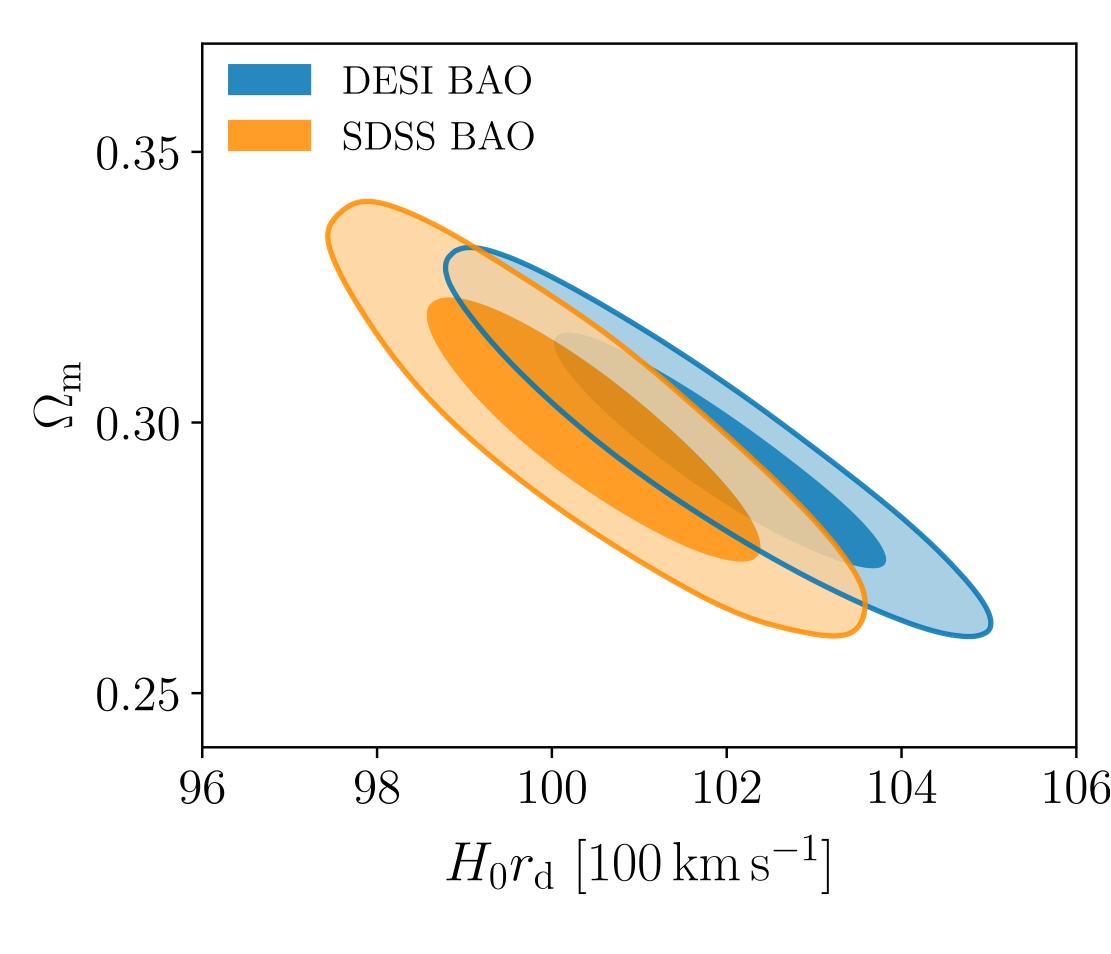
#### DARK ENERGY **SPECTROSCOPIC** INSTRUMENT

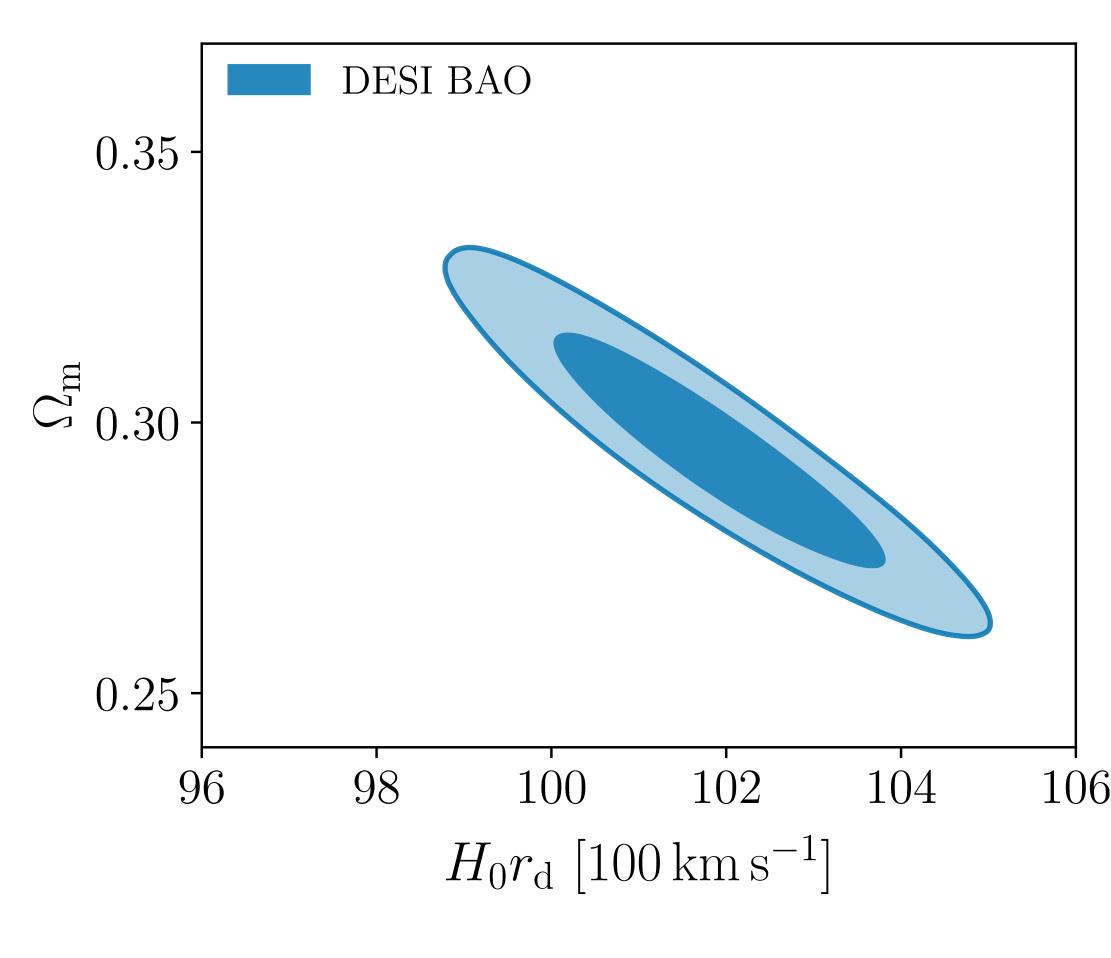
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#### DESI VI. Cosmological constraints - Aug 2024 XII ICNFP @ Crete, Greece, 2024

#### **Uendert Andrade (UMichigan)**







# eBOSS Collaboration, 2020





#### CMB

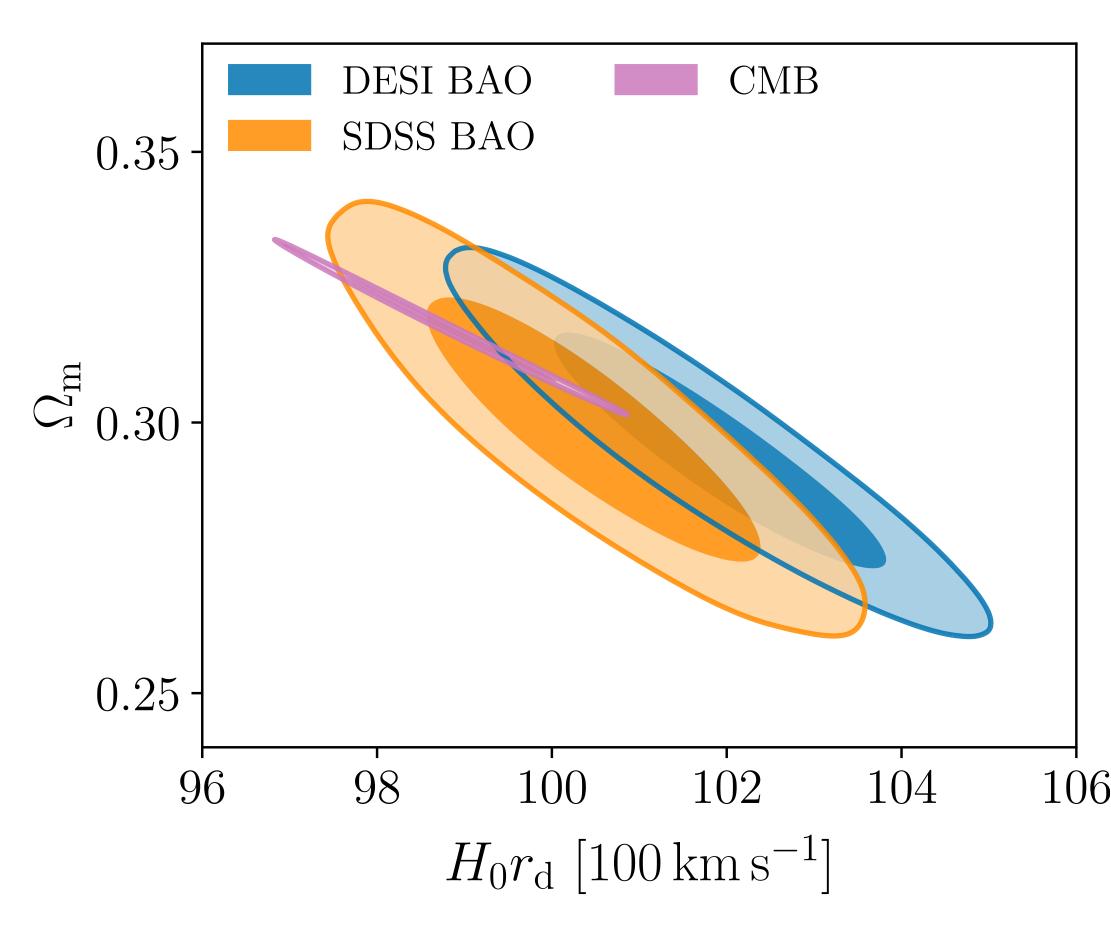
## ACT Collaboration, 2023 Carron, Mirmelstein, Lewis, 2022

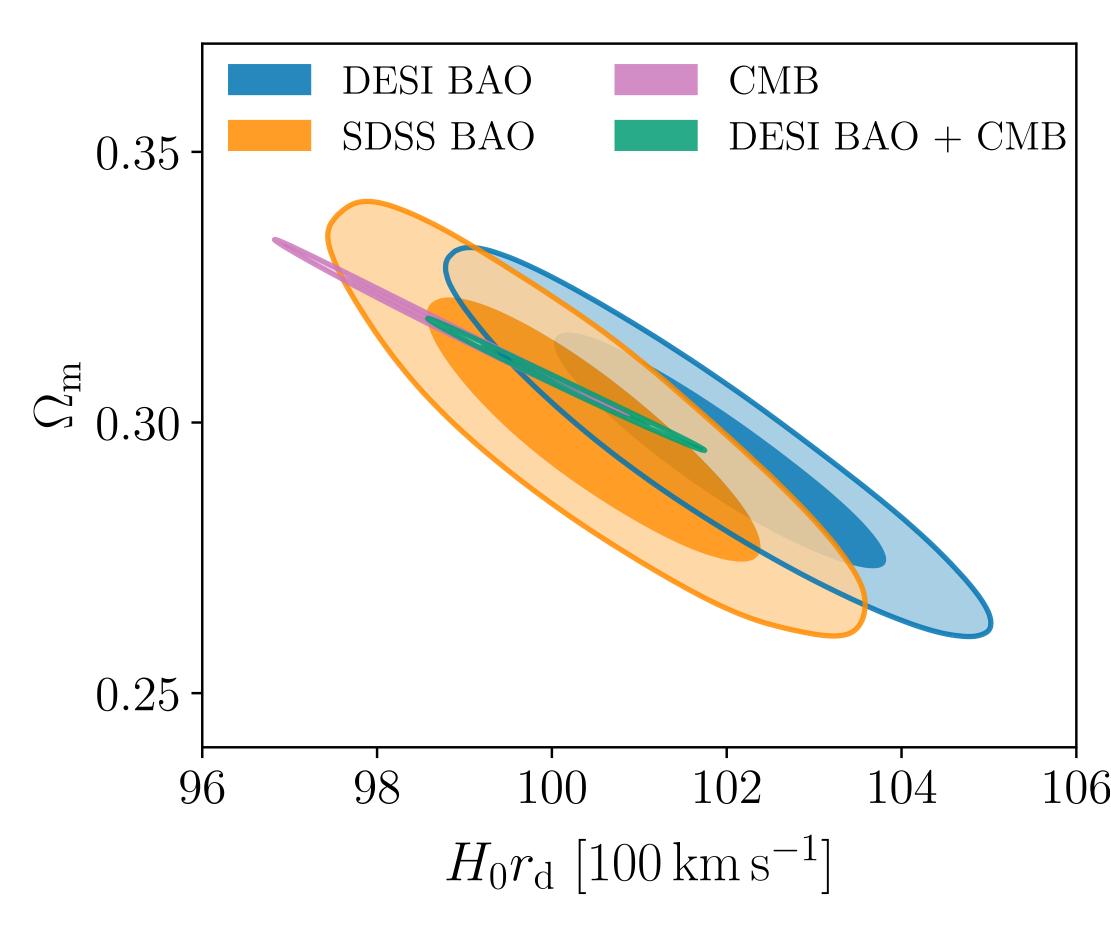
2018

Planck Collaboration,



## 







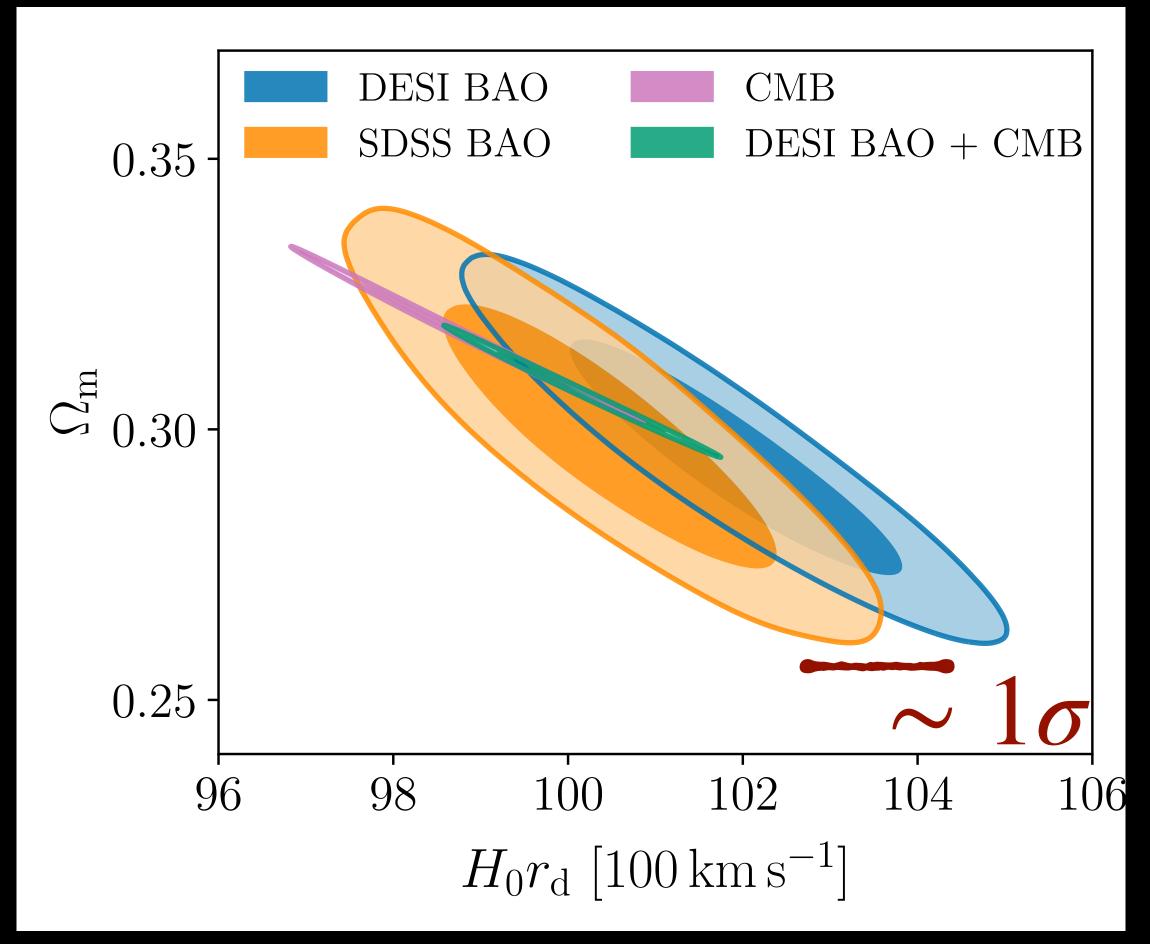
## DESI vs. external probes

### DESI Y1 BAO consistent with:

- SDSS (eBOSS Collaboration, 2020)
- primary CMB: <u>Planck Collaboration</u>,
  2018 and CMB lensing: Planck PR4 +
  ACT DR6 lensing <u>ACT Collaboration</u>,
  2023, Carron, Mirmelstein, Lewis, 2022

$$\Omega_{\rm m} = 0.3069 \pm 0.0050$$
 (1.6%)

DESI + CMB



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# Hubble constant

• BAO constraints  $r_{\rm d}(\Omega_{\rm m}h^2,\Omega_{\rm b}h^2)~h$