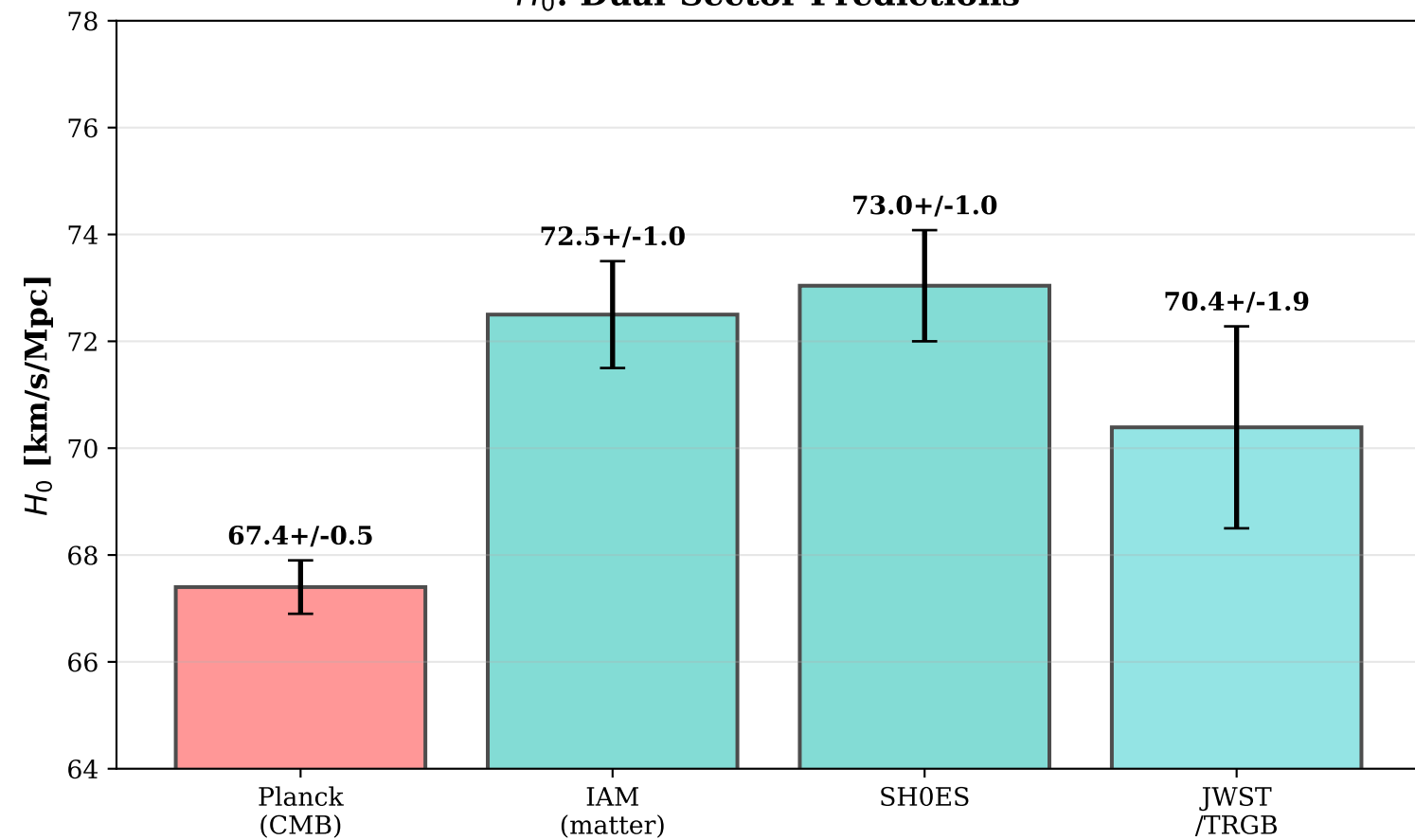
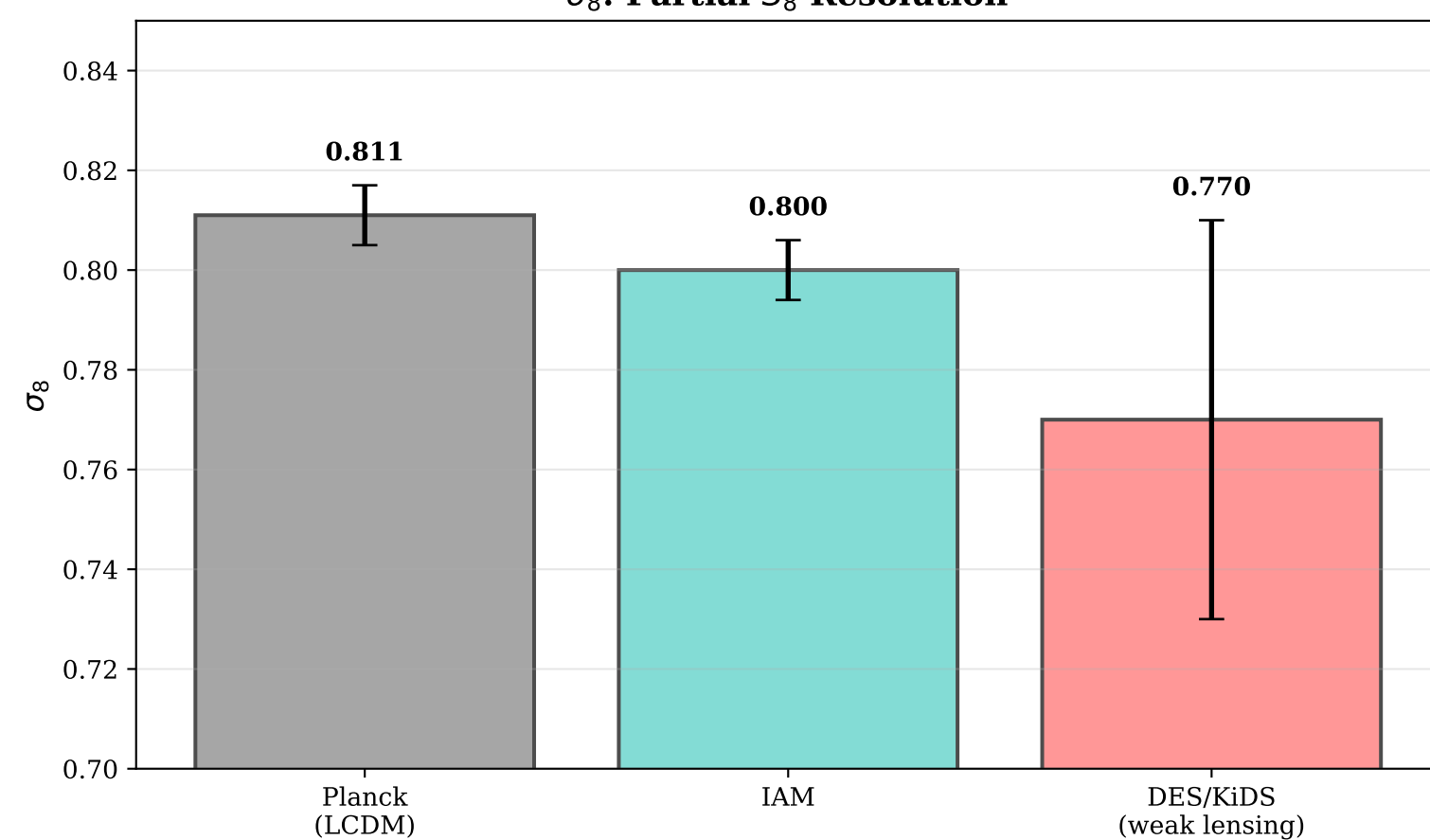


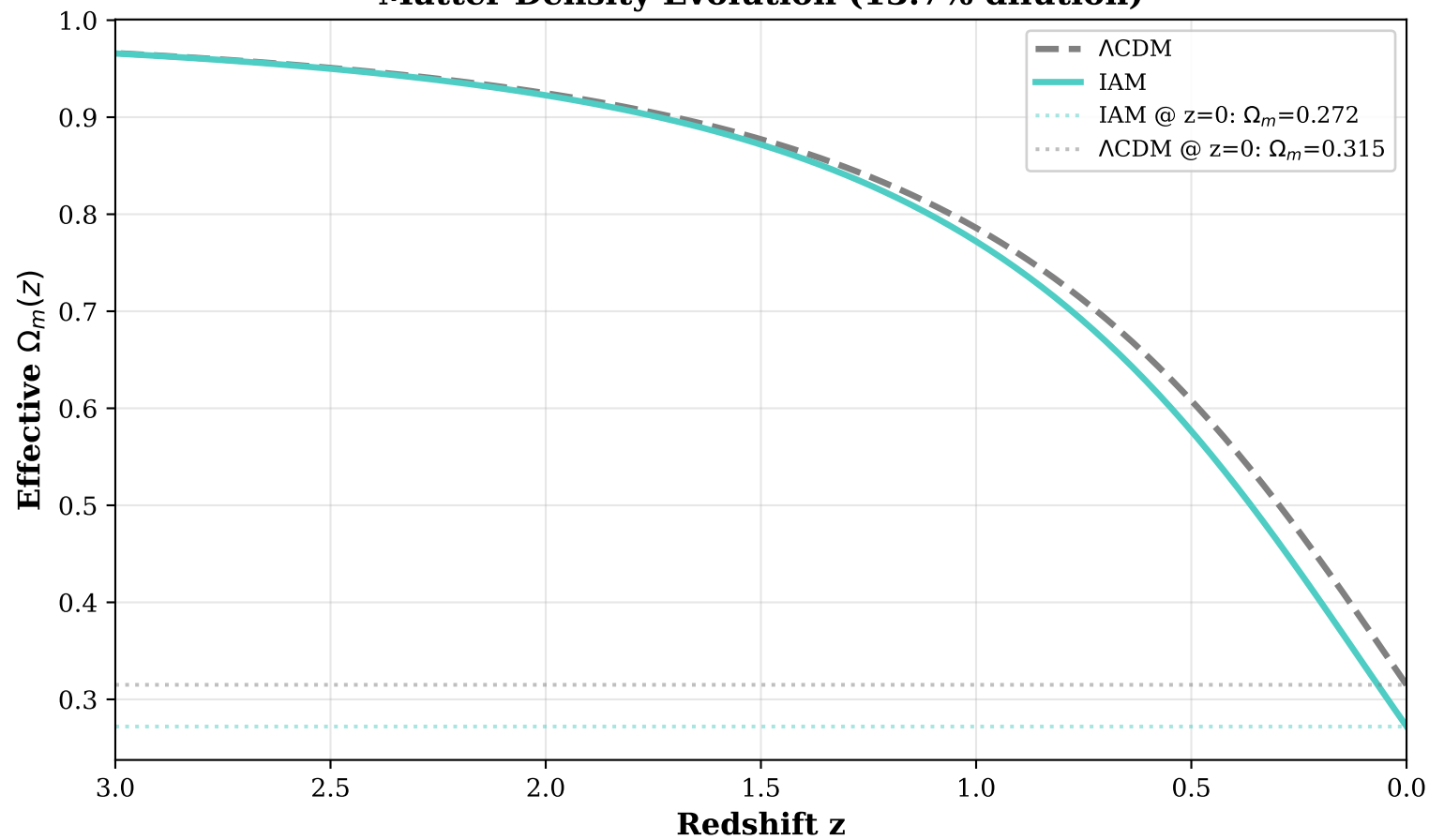
$H_0$ : Dual-Sector Predictions



$\sigma_8$ : Partial  $S_8$  Resolution



Matter Density Evolution (13.7% dilution)



#### IAM Dual-Sector Results

##### Parameters:

beta\_m = 0.157 +/- 0.029 (68% CL)  
beta\_g < 0.004 (95% CL)  
beta\_g/beta\_m < 0.022 (95% CL)

##### Hubble Parameter:

$H_0(\text{photon}) = 67.4$  km/s/Mpc  
 $H_0(\text{matter}) = 72.5 \pm 1.0$  km/s/Mpc  
sig8(IAM) = 0.800  
 $\Omega_m(z=0) = 0.272$  (13.7% diluted)

##### Statistical Performance:

chi2(LCDM) = 38.28  
chi2(IAM) = 8.27  
Dchi2 = 30.01  
Significance = 5.5 sigma

##### Mechanism:

- beta dilutes  $\Omega_m(a)$
- Diluted  $\Omega_m$  -> weaker gravity
- Growth suppression: 1.36%
- Natural growth suppression