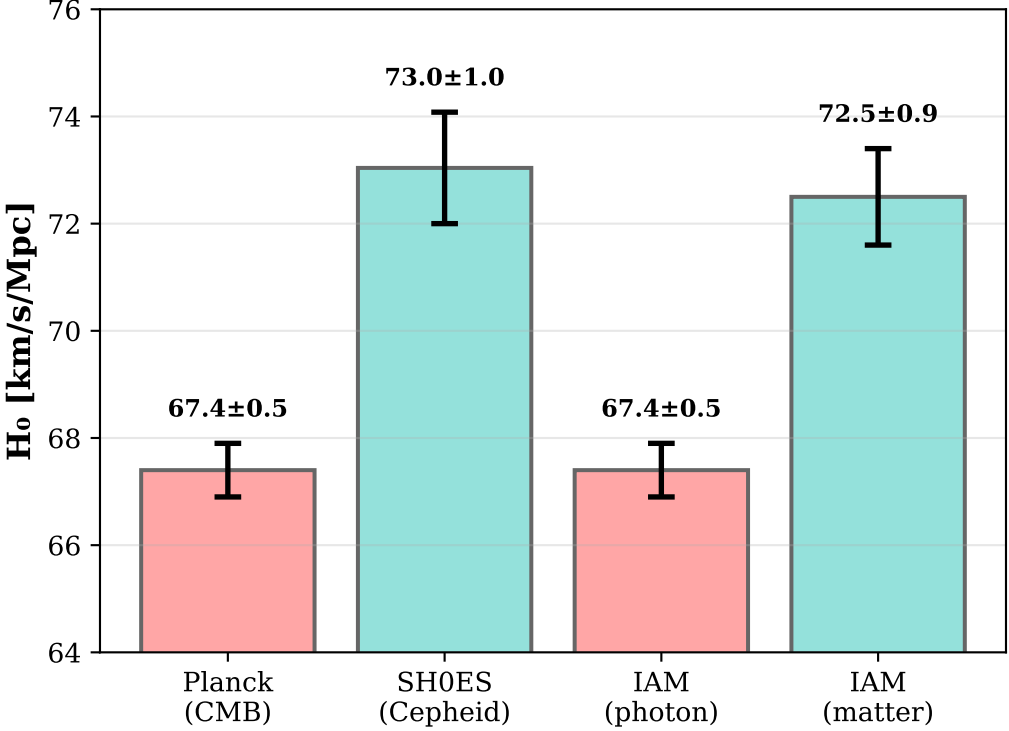
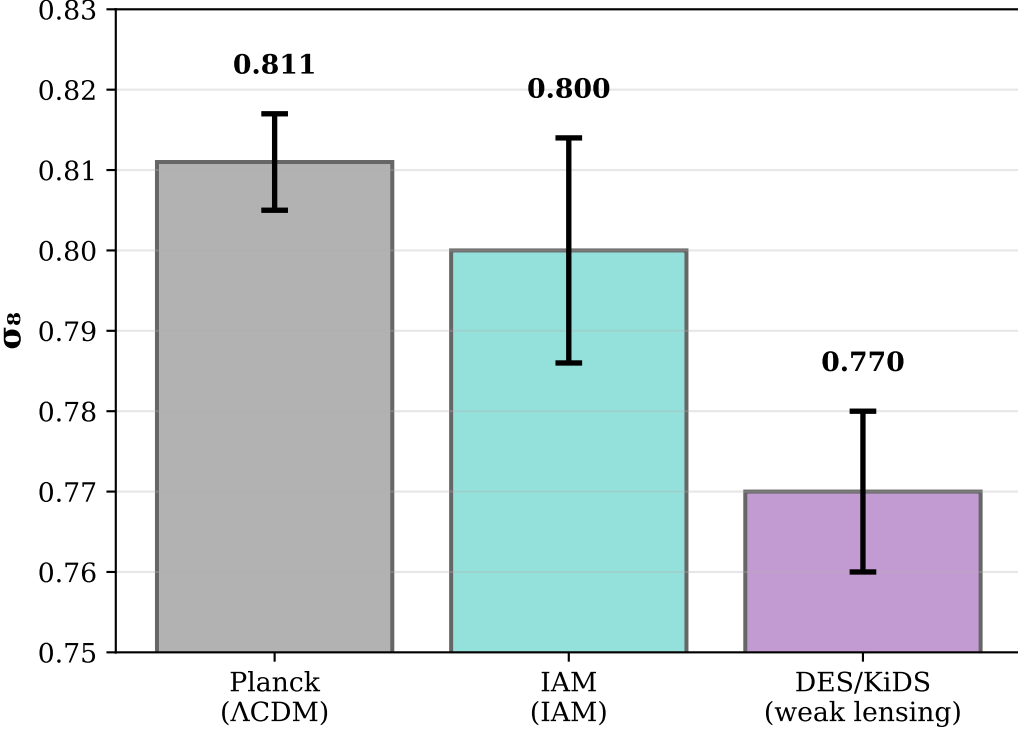


# IAM Physical Quantities & Performance Summary

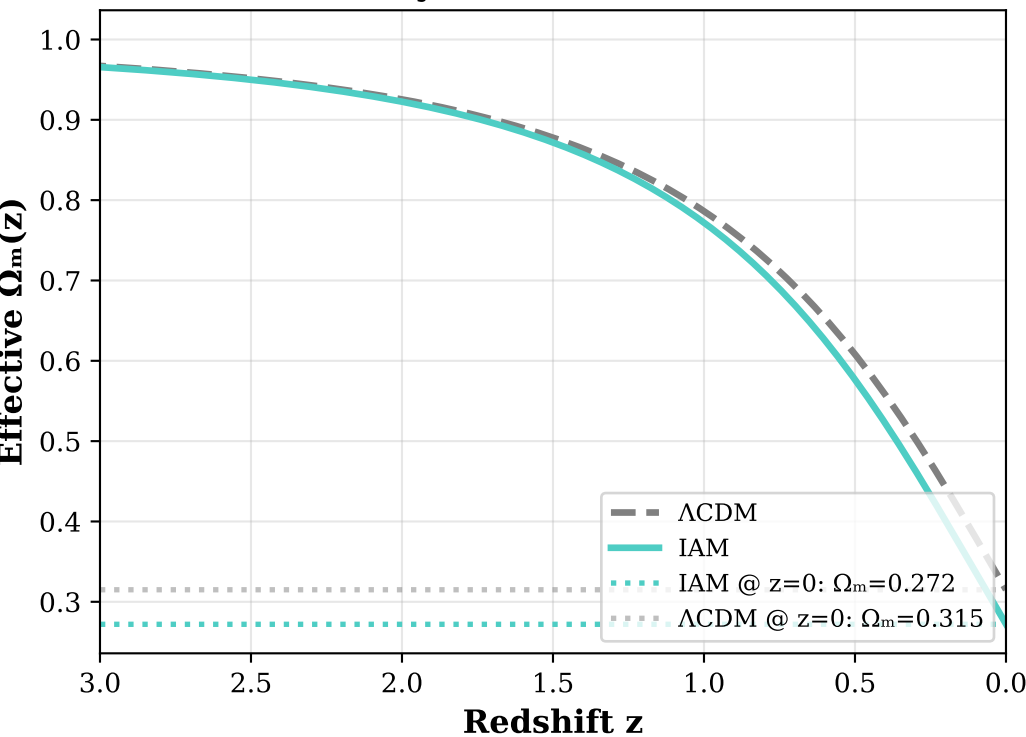
**H<sub>0</sub>: Dual-Sector Predictions**



**σ<sub>8</sub>: Partial S<sub>8</sub> Resolution**



**Matter Density Evolution (13.7% dilution)**



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IAM DUAL-SECTOR MODEL: SUMMARY  
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Parameters:

β<sub>m</sub> = 0.157 ± 0.029 (68% CL)

β<sub>γ</sub> < 0.004 (95% CL)

β<sub>γ</sub>/β<sub>m</sub> < 0.022 (95% CL)

Predictions:

H<sub>0</sub>(photon) = 67.4 km/s/Mpc

H<sub>0</sub>(matter) = 72.5 ± 0.9 km/s/Mpc

σ<sub>8</sub>(IAM) = 0.800

Ω<sub>m</sub>(z=0) = 0.272 (13.7% diluted)

Statistical Performance:

χ<sup>2</sup>(ΛCDM) = 41.63

χ<sup>2</sup>(IAM) = 10.38

Δχ<sup>2</sup> = 31.25

Significance = 5.6σ

Physical Mechanism:

- β in denominator dilutes Ω<sub>m</sub>(a)
  - Diluted Ω<sub>m</sub> → weaker gravity
  - Growth suppression: 1.36%
  - Natural growth suppression
- =====