

The Morphologies of Galaxies in the SDSS3 Baryon Oscillation Spectroscopic Survey from COSMOS HST Imaging

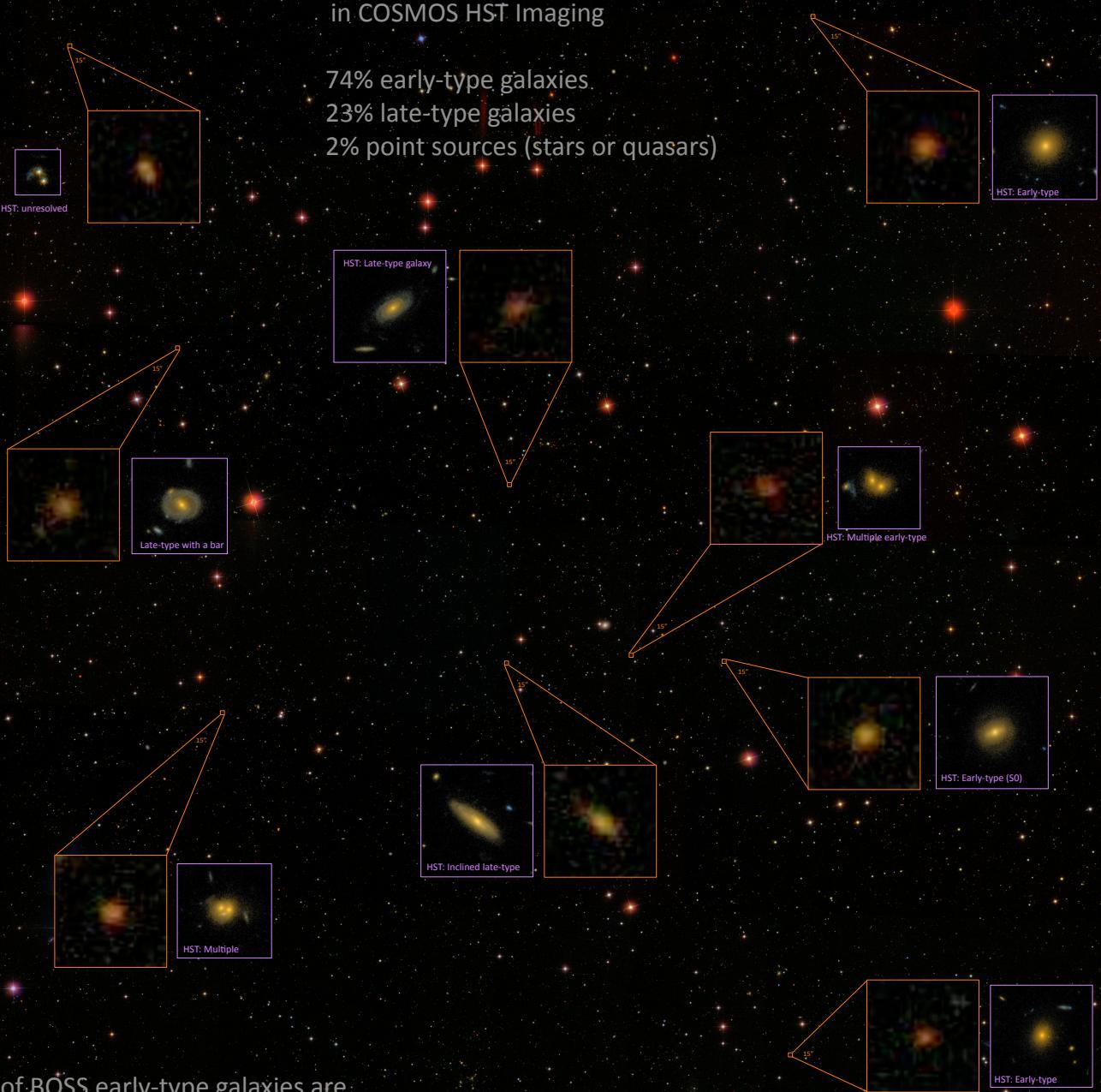
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We find 240 BOSS target galaxies
in COSMOS HST Imaging

74% early-type galaxies.
23% late-type galaxies
2% point sources (stars or quasars)



- 23% of BOSS early-type galaxies are resolved into multiples in HST images – dry mergers at $z \sim 0.5$?

- A colour cut of $(g-i) > 2.35$ can produce a sample which is 90% early-type galaxies.

(MNRAS in press; arXiv:1106.3331)

Background: SDSS gri image of the COSMOS area 1.3x1.3 deg
(produced with help from Edd Edmondson¹).

SDSS 15x15" gri cutouts from Skyserver: skyserver.sdss3.org

HST colour cutouts produced for Galaxy Zoo: Hubble
www.galaxyzoo.org using COSMOS ACS imaging

The Moon to scale with the large mosaic



Baryon Oscillation Spectroscopic Survey:
Includes spectra of 1.5 million galaxies over
10,000 sq deg at $0.2 < z < 0.7$.
Goal – percent level precision on cosmological
parameters from BAO (Baryon Acoustic
Oscillations)