

DESI Survey: Making the Largest 3D Map of the Universe

3 million
Quasars ($0.9 < z < 2.1$)
+ Ly- α forest ($2.1 < z$)

Science drivers:

- Baryon Acoustic Oscillations
- Redshift Space Distortions

13.5 million Bright Galaxies
($0.0 < z < 0.4$)

From 2021-2026 DESI will measure precise redshifts to
~40 million galaxies over 14,000 deg².



Baryon Acoustic Oscillations (BAO)

- Gravity and pressure generated sound waves in the primordial plasma
- When baryons and photons decoupled, the sound waves stopped

