

DESI

The Dark Energy Spectroscopic Instrument

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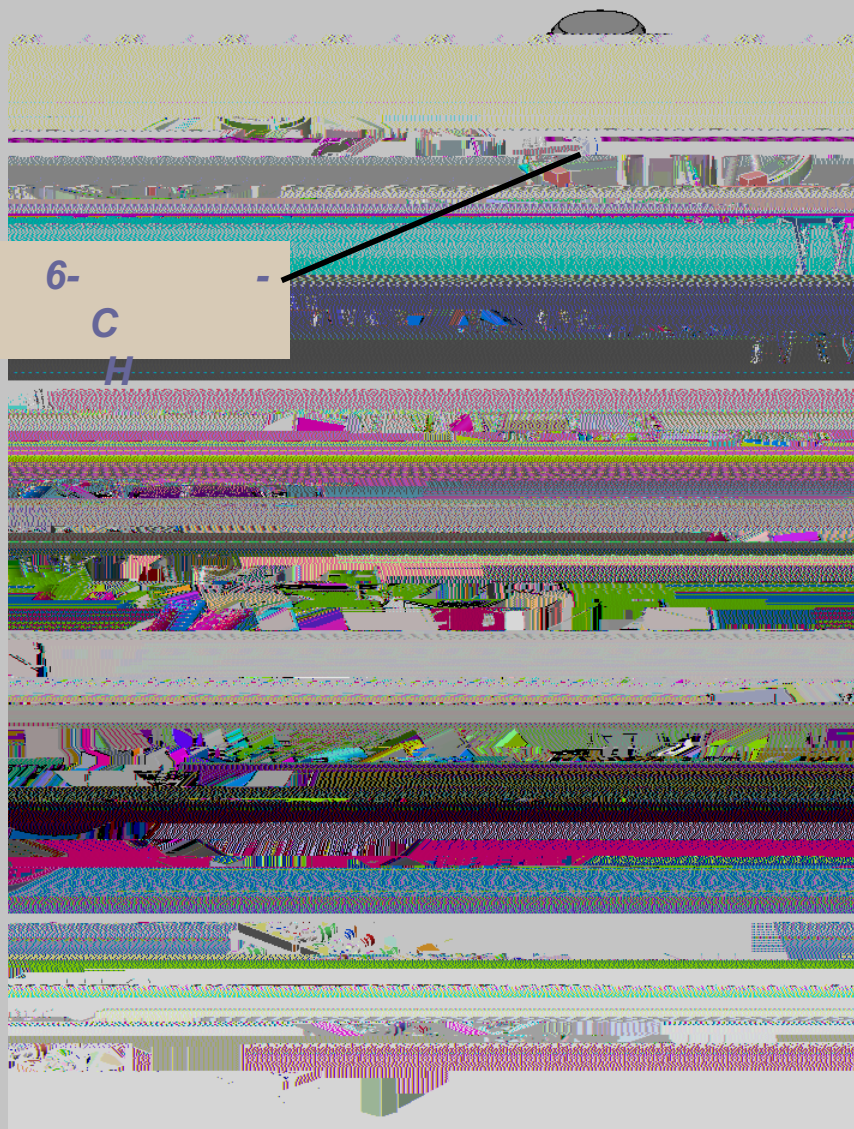


Mayall 4-Meter Telescope



600 scientists from 82

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H



- *~35 million redshifts over 14,000 sq. degrees (baseline survey)*
- *After commissioning in Sep 2019, Survey validation and then 5 yea*



- **14,000**

- **DESI**

1000

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DESI a







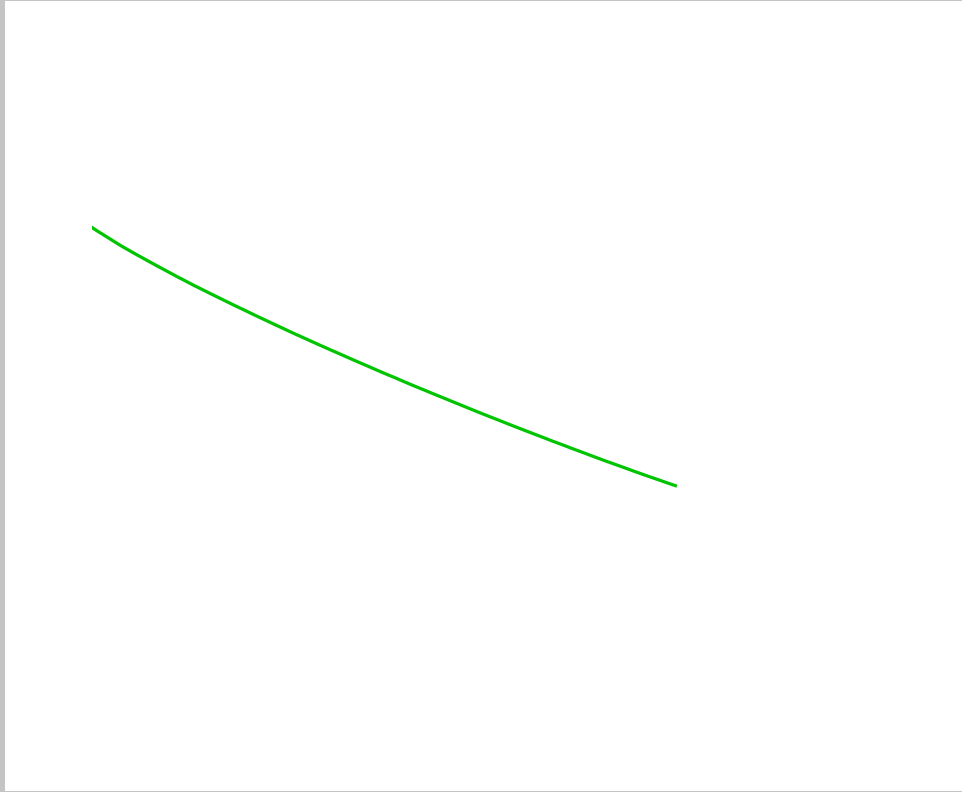
DESI Bright Galaxy Survey

- ! ~10 million galaxies
- ! 14K sq. deg.
- ! $r < 19.5$ (median redshift $z \sim 0.2$)
- ! BAO only: increases FOM by about 30%
- ! RSD, cluster & group counts, cross-correlation with imaging surveys, modified gravity tests

BAO







1. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

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Current and planned Large Surveys

