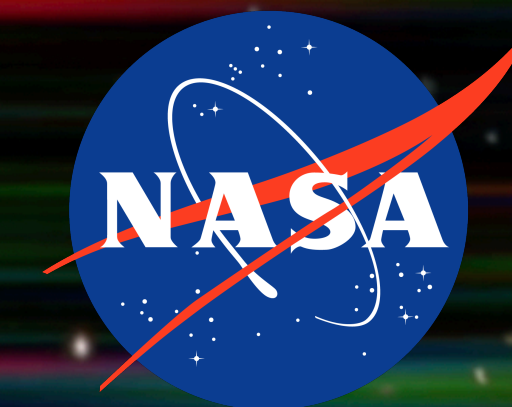


Non-linear power spectrum models for Roman High Latitude

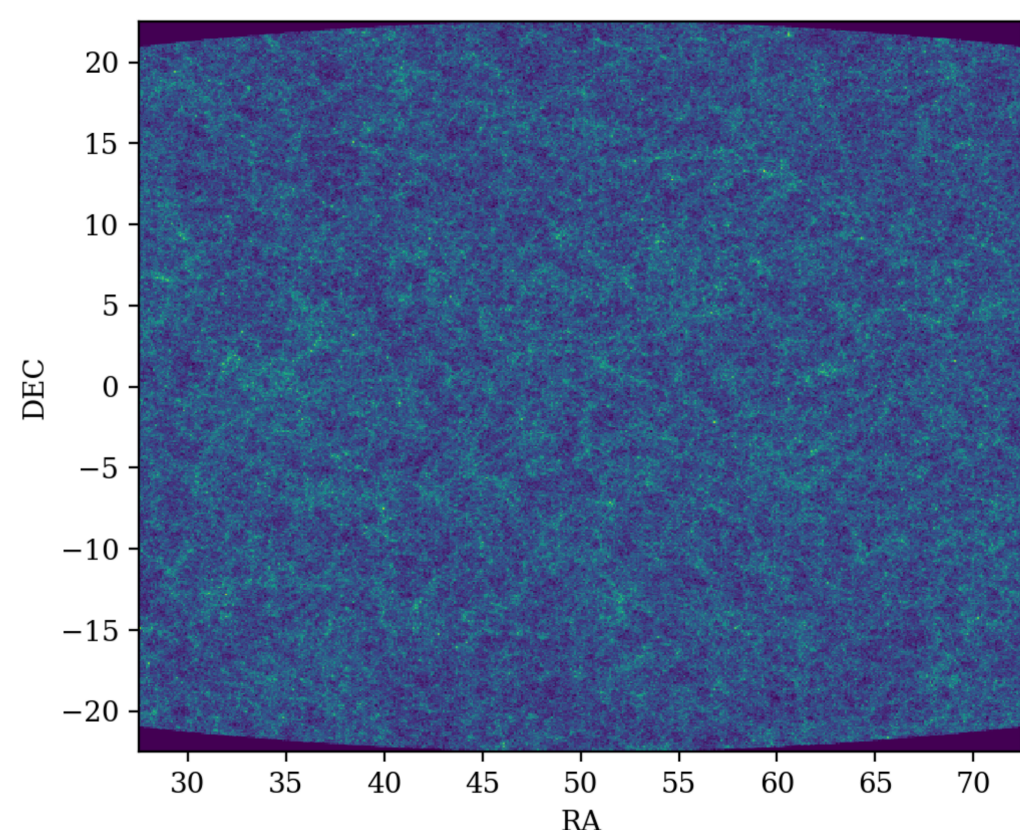
Spectroscopic Survey between $1.0 < z < 1.2$

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- 2000 deg² near-IR grism wide field camera achieves an emission line flux limit of 10^{-16} erg/s/cm² at 6.5σ
- HLSS will measure $\sim 10^6$ H α galaxy redshifts between $z = 1-2$
- Look to test theories of gravity and better understand the nature of cosmic acceleration.



- Mock galaxy catalog created to reproduce H α -counts seen in HST WFC3 and H α -luminosity function observed in HiZELS.
- Galaxies painted onto UNIT N-body simulation with GALACTICUS semi-analytical model.

- To obtain accurate and unbiased constraints on cosmological parameters we must determine the appropriate models for the galaxy-galaxy clustering power spectrum monopole (P_0) and quadrupole (P_2) moments in redshift-space down to small scales.
- We find that nonlinear corrections to linear CDM theory require inclusion of baryonic effects and are sensitive to how we model the Finger-of-God.

