

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 160 Hours

Proposal Title: The Convergence Depth of the Universe

ABSTRACT:

Peculiar motions, or large-scale deviations from pure Hubble flow, arise from gravitational forces originating from fluctuations in the mass density field. The study of the peculiar velocity field provides dynamical information which leads, in turn, to the large-scale distribution and overall content of mass in the universe. The weakest link in the current attempts at mapping the peculiar velocity field is the paucity of field galaxy data between $cz \sim 5000$ and 10000 km/s. We propose to fill that gap by obtaining HI profiles of a first set of 320 galaxies for which we already have I band photometry and redshift information. We request 160 hours of telescope time between 8 and 19 hours RA with the narrow L band feed.

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Instrument Setup

L-narrow

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1360-1420

This proposal requires coordination with GPS L3 at 1381 MHz.