

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 120 Hours

Proposal Title: Peculiar Motions within the Pisces-Perseus Supercluster

ABSTRACT:

In order to complete a peculiar velocity survey in the region of the Pisces-Perseus supercluster, we propose to undertake HI line observations of a set of spiral galaxies for which photometric I-band images are already available. The new data will provide the redshifts and rotation parameters needed to derive peculiar velocities via the Tully-Fisher relation. In combination with existing data, this new sample will more than double the sky density of previously published I-band peculiar velocity catalogs in and around Pisces-Perseus, allowing for the definitive measure of backside infall onto the supercluster, the determination of the statistical properties of the velocity field and an estimate of the cosmological density parameter.

Name	Institution	E-mail	Phone	Student
Martha P Haynes	Cornell University	haynes@astro.cornell.edu	607/255-0610	no

I might want to do remote observing.

Instrument Setup

L-narrow

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1360-1425

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz..

This proposal requires coordination with GPS L3 at 1381 MHz.