

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 13 Hours

Proposal Title: Investigating the Star Formation Histories of Low-Luminosity Early-Type Galaxies

ABSTRACT:

The hierarchical scenario of galaxy formation predicts that the ages of smaller mass systems should be older than their larger counterparts. To provide constraints to this model, we have initiated a study of low-luminosity early-type galaxies in the Virgo cluster. Spectroscopic age diagnostics already indicate that these galaxies have experienced a large range in star formation histories with 20% of the galaxies in our sample having recent star formation episodes within the last 2 Gyr. Understanding how these observations constrain models of structure formation requires information about the star formation histories of these galaxies and the effects of the cluster environment on their evolution. To determine this, we have initiated a study which will compare the mean age of the galaxy's stellar population to the amount of HI available to fuel further star formation episodes. Our desire to continue our HI observations is the motivation of this observing proposal.

Name	Institution	E-mail	Phone	Student
Kristi D Concannon	University of North Carolina at Chapel Hill	dendy@physics.unc.edu	919-962-3683	G

I might want to do remote observing.

Instrument Setup

L-narrow

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned