Seminario

Jueves, 16 de Mayo de 2013
12:00 hrs, **Auditorio IA-Ensenada**

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"HAGGIS SURVEY - DATA REDUCTION TECHNIQUES AND FIRST RESULTS."
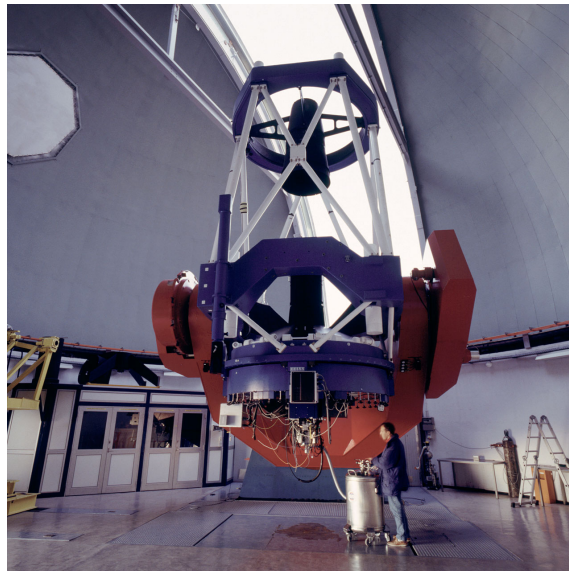
Galaxy environment plays a vital role in regulating the star forming gas in the galaxies. We see the environmental effects on star forming disk galaxies, in the form of truncated and or enhanced star formation, at least in dense environments such as that of Virgo cluster, but the role of environment is unclear in less dense environments such as that of local groups of galaxies. The fraction of S0 population increases for the group environments compared to the isolated field galaxies and it is very much similar to the dense cluster environments,. This suggests that similar processes are at work even at less dense environments. In this project we are examining the role of environment played in less dense regions such as small galaxy groups. We examine the growth of galaxy disks by comparing the disk profiles and sizes of old stars (seen in the continuum) with the disks of their star forming gas (seen using the H-alpha emission line which traces star formation). We have observed the rest frame Hα emission using narrow bands on INT WFC and 2.2 MPG/ESO WFI instruments for ≈100 SDSS groups at $0.01 < z < 0.04$ selected in the halo mass range 10^{12-14} solar masses. This allows us to trace the impact of galaxy mass and environment on the growth of star forming disks and their suppression at low redshift. I will describe the data reduction procedures we follow for such an extensive amount of data and will present the first results from this analysis.