Yale University
Physics Department
Postdoctoral Position in Astrophysics/Cosmology

Attention: Prof. Charles Baltay

Physics Department Yale University New Haven CT 06520 Charles.baltay@yale.edu

The Yale University Physics Department is inviting applications for a Postdoctoral position in Astrophysics and Cosmology. The focus of our research group is the investigation of the nature of the mysterious major component of our universe called Dark Energy, as well as a broad study of variable and transient objects such as Supernovae, quasars, and Trans Neptunian Objects. Three major projects that we are involved in are the ongoing La Silla/QUEST Southern Hemisphere Variable Survey, the proposed BigBOSS experiment and the proposed WFIRST space mission.

The LaSilla/QUEST survey uses the 10 square degree QUEST camera on the ESO Schmidt telescope at the LaSilla Observatory in Chile. With 90% of the telescope time dedicated to it the survey plans to cover 15,000 sq degrees of sky with a repeat cadence of two days to look for variable and transient objects. Primary motivations for this survey are the collection of a large sample of nearby Type 1a supernovae for cosmological studies, TNO's, RRLyrae variables, tidal disruption events, etc.etc. Spectroscopic and photometric followup are available via collaborations with groups that have such facilities.

The BigBOSS project proposes a 5000 object spectrometer on the 4 meter Mayall Telescope at Kitt Peak to obtain 30 million spectra of galaxies to study cosmology via the Baryon Accoustic Oscillation method.

The WFIRST space mission that has received the highest priority from the recent Decadal Survey is now in the planning stage. The interest of our group is the collection of a large sample of Type 1a supernovae for cosmological studies. The large number of nearby supernovae collected by the LaSilla/QUEST survey will complement the high redshift sample obtained in space.

We are looking for applicants with a recent PhD in Astrophysics or a related field with some experience in unix programming and in analyzing astronomical data sets. Some hardware experience is also desireable. Applicants are requested to send their curriculum vitae, bibliography, and three letters of reference either via email or regular mail to Prof C. Baltay at the address above . Yale is an Affirmative Action, Equal Opportunity Employer, and we particularly encourage applications from women and minority groups.