

Time Domain Spectroscopic Survey (TDSS)

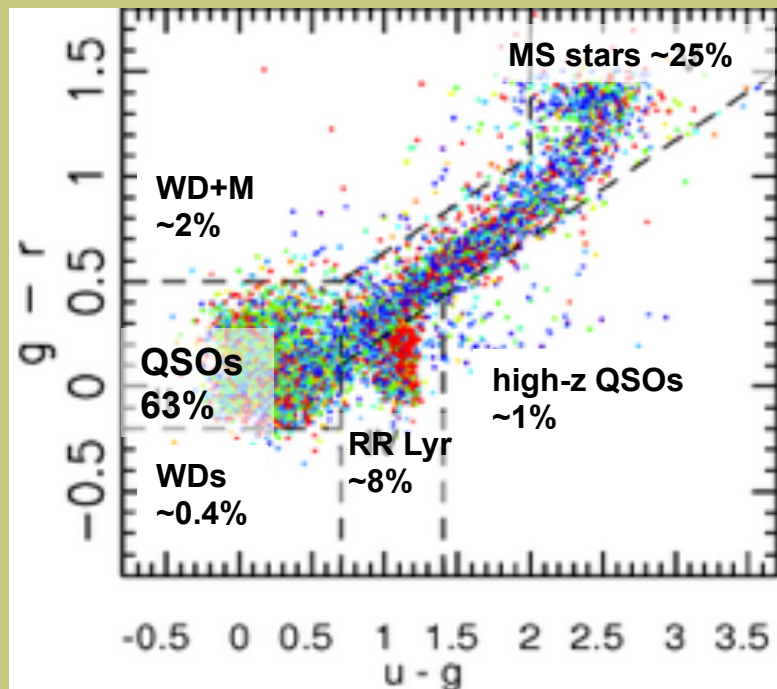
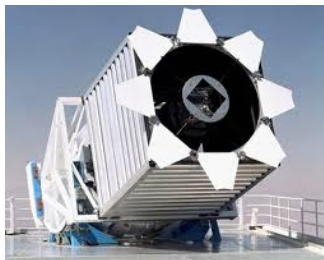
SDSS-IV Spectroscopy of Celestial Variables (subprogram of eBOSS, starting ~2014)

- The first large sky area spectroscopic survey of variables.
- Pathfinder for LSST, etc.
- Up to 30deg^{-2} or $\sim 10^5$ spectra of variables
- Selected from **PanSTARRS-1** 3π survey: ~ 12 imaging epochs in *grizy* bands over $30,000\text{ deg}^2$

Science Highlights:

- Boost QSO completeness amid the stellar locus ($z\sim 0.8$ and $z\sim .27$)
- Constrain accretion disk models
- New M/L dwarfs and eclipsing binaries
- RR Lyr to map halo kinematics

Sesar et al. 2007
Stripe 82



- New pulsating WDs
- CVs
- Transient hosts (SNe, TDEs, GRBS)
- Systematic serendipity!

