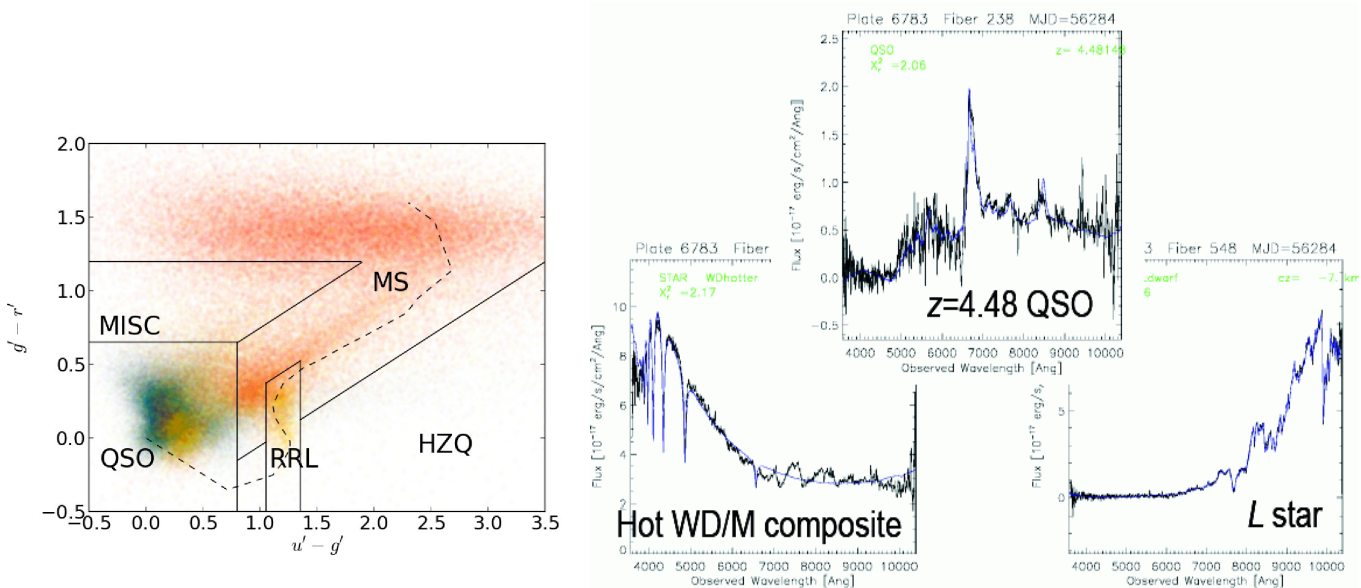


The Time Domain Spectroscopic Survey (TDSS)

- 4-6 Year Optical Spectroscopic Survey already begun
- 260,000 spectra of variables selected from PanSTARRs
- science pathfinder for LSST and other TD imaging surveys
- piggybacks on SDSS IV eBOSS survey
- covers ~ 7500 deg² of sky to $i \sim 21.5$ mag
- 90% will be discovery spectra
- Science on brown dwarfs, eclipsing binaries, CVs, RR Lyr, Quasars
- *Students welcome!*



Most variable objects range across the full color plane.

Spectra probe a wide range of astrophysics.

TDSS Few Epoch Spectroscopy

$\sim 10,000$ second epoch spectra for spectroscopic variability probes

- activity in late-type Main Sequence stars, and dM/WD binaries
- 'HyperVariable' stars and quasars
- BAL trough variability in quasars
- double-peaked emitters ($z < 0.8$)
- quasar broad H β variability ($z < 0.8$)
- RV variations in dwarf carbon stars

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