

Hot Stars (White Dwarfs, and Co.)

Rekesh Mohan
IIA

Background..

- SDSS DR-7: close to 20,000 white dwarf spectra
(ApJS, Jan 2013) Mostly DA & DB
- Pulsations in Carbon White Dwarfs (2008)
upto 30% variation, periodicity - 100s to 1000s of seconds
- Halo white dwarfs – contribution to mass in the halo
(Oppenheimer et al., 2001)
- Cool white dwarfs, planets and habitable zones (Dufour et al 2010).
- Survey of local white dwarfs – 46 WD within ~13 pc
(Holberg et al 2002)
- Related - Extreme Helium stars

White Dwarf Survey with UVIT

- UV is better suited for WD detection. UVIT – more filters than GALEX
- Automated source extraction and classification
- Further studies, follow-up using ground based telescopes