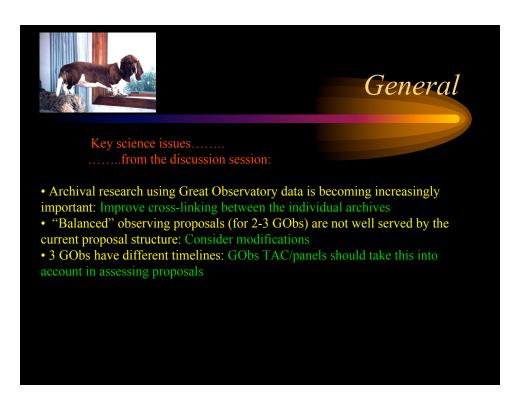
# Stars & Planets Discussion points





# Planetary systems

# Key science issues......

# .....from the review

- Colours, compositions and masses of KBOs: Spitzer & HST imaging
- Physics of extrasolar planets through observations of transiting systems, particularly M dwarf planets: Spitzer & HST time-resolved imaging & spectra
- Observations of Solar System gas giants transient phenomena: Chandra, Spitzer & HST imaging & spectroscopy

### from the discussion session:

- Statistics & structure of protoplanetary disks probing planet formation in the outer disk: Chandra to find young stars to target; Spitzer to find disks; & HST to image disks focus on complete samples and sub-solar mass stars
- Concerted observations of comets structure and composition: Chandra gas emission, HST imaging, Spitzer IRS spectra



# Stars MS and beyond

## Key science issues......

### from the review

- Beyond T dwarfs probing extreme ultracool dwarfs: Spitzer & HST imaging of targets identified through ground-based surveys (UKIDSS)
- UV spectra of [Fe/H]<-5 stars constraining the first epoch of Milky Way star formation: HST STIS/COS spectra of stars identified through ground-based surveys
- Systematic study of interacting binaries particular emphasis on investigating potential SN I1 progenitors: Chandra + HST UV spectra
- Galactic Bulge globular clusters age, composition & evolution from near-IR CMD analysis: HST IR imaging (WFC3)



# Stars MS and beyond

### from the discussion session.

- Astrophysics of jets and outflows systematic coordinated study of well-defined, representative sample: Chandra, HST & Spitzer imaging of a statistically representative sample; multi-epoch observations for variability
- Excavating the stellar graveyard characteristics of neutron star & black hole populations: Chandra detection in nearby galaxy, Spitzer and HST imaging to characterise environment
- Star cluster dynamics mass segregation, stellar evolution & neutron star/BH progenitors: Chandra, HST & Spitzer imaging & spectra
- Coordinated observations of the Galactic Centre transient phenomena & environment: Chandra, Spitzer & HST imaging & spectra
- Mass loss and winds in massive stars: Chandra, HST, Spitzer imaging & spectroscopy
- Probing the low-mass IMF searching for planetary-mass brown dwarfs in young star clusters: Deep Spitzer imaging, targeted HST imaging