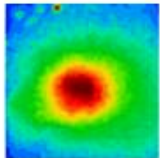




Chandra X-ray Observatory

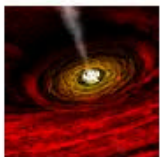
CHANDRA SCIENTIFIC ADVANCES



GALAXY CLUSTERS:

Imaging spectroscopy of the largest gravitationally bound objects in the universe

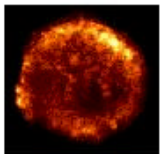
- Observing formation and evolution of large scale cosmic structure
- Accurate determination of baryonic and dark matter content and distribution



QUASARS:

Imaging cosmic jets and spectroscopy of accreting supermassive black holes

- X-ray images of high energy jets from accretion disks and black holes
- Probe of last stable orbit around black hole via iron line spectroscopy



SUPERNOVAE & SUPERNOVA REMNANTS:

Imaging spectroscopy of exploded stars

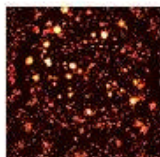
- New insights into origin & dispersal of heavy elements necessary for life
- Dynamics of strong shock waves (especially SN 1987A)



STELLAR CORONAE:

High resolution grating spectroscopy

- Unparalleled spectra of hot magnetized plasma under conditions not achieved in terrestrial labs



NEW CLASSES OF SOURCES:

High resolution deep surveys

- Hundreds of new sources in each deep field
- Quasars, starburst galaxies, possible new classes of objects