Chandra Users Committee Meeting
Center for Astrophysics
January 20, 2000

The Emission Line Project

- Goal: To improve the atomic data for X-ray spectroscopy
- Critical Issues:
  - Large uncertainties in atomic rates, wavelengths
  - Missing emission lines and processes
- Summary of ELP proposal results
  - 80 participants signed up through proposal process
  - Level 1: 25 proposals received
  - Level 2: 25 proposals received, 15 funded,
    $351,110 requested, $150,000 awarded
    * Distribution: 4 lab/expt, 9 theory, 2 data compilation
- Status of the observations
  - ELP data obtained as part of in-flight calibration
    Capella, Procyon, and HR 1099
  - Roughly half the data are archived
  - Archived data have processing and calibration issues
  - ELP Core Working Group is addressing the various issues
    (includes HETG, LETG, CXC Cal, CXC SDS, MSFC)
  - First light papers for both HETG and LETG Capella observations are in progress
- Related efforts
  - Chandra ELP data analysis and dissemination of results
  - Atomic database for X-ray spectroscopy (FITS files)
  - Spectral emission code output (FITS files)
  - CIAO spectral analysis tool development
  - Collaborations to address specific atomic data needs