

**SOURCE DETECTION, EXTRACTION, AND ANALYSIS IN THE CHANDRA ORION ULTRADEEP FIELD.** *G. Franz, J. Kastner\*, Center for Imaging Science, [gaf1551@cis.rit.edu](mailto:gaf1551@cis.rit.edu), [jhkpci@cis.rit.edu](mailto:jhkpci@cis.rit.edu)*

The Chandra Orion Ultradeep field, the result of an almost two-week-long observation of the Orion Nebula with NASA's Chandra X-ray Observatory, provides the best-ever view of this famous celestial object in the X-ray wavelength region. The detection of the thousands of sources contained within the image is a crucial first step to a new understanding of the nature of recently formed stars in the Orion region. We are developing a program to detect the X-ray sources and to extract their light curves and spectra. For all sources detected, we crosscheck against archival data for young stars known to be at those positions. Further analysis of the X-ray light curves and spectra allows for comparison with properties of the stars as determined from observations optical, infrared, and radio wavelengths. Our initial study is focusing on the X-ray properties of the most massive stars, as well as stars thought to be actively accreting from circumstellar disks.