X-RAY ASTRONOMY 2019
Current Challenges and New Frontiers in the Next Decade
8-13 September 2019
CNR/INAF Research Area, Bologna, Italy

Contribution ID: **98** Type: **Poster**

The Hunt for UFOs with Chandra-HETGS

Friday, 13 September 2019 18:22 (2 minutes)

Ultra-fast Outflows in AGN were first suggested based upon low spectral resolution CCD data in the 6-8 keV range, and were ascribed to absorption by highly ionized Fe. In this region, CCD resolution isn't dramatically below that of gratings. Further evidence for UFOs has been claimed from high spectral resolution observations with the XMM-Reflection Gratings Spectrometer, and has been extended to Ultra-Luminous X-ray sources. The <2 keV region, however, is extremely crowded, and UFO models often posit multiple absorbers with a range of blueshifts. It is not clear that even RGS resolution suffices. I discuss two recent UFO studies using the Chandra-HETGS. We gain from improved resolution, but suffer from low effective area. First, for the AGN PG1211+143, we were able to verify the presence of an absorber outflowing at 0.06 c. Next, for the ULX NGC 1313 X-1 we are still trying to determine if there is evidence for a UFO, and if not, do our observations contradict prior RGS studies?

Topic

Active Galactic Nuclei: accretion physics and evolution across cosmic time

Affiliation

Washington University in St. Louis

Primary authors: NOWAK, Michael (Washington University in St. Louis); Dr LEE, Julia (Harvard-SEAS); Dr KRISS, Gerry (STSCI); Prof. CANIZARES, Claude (MIT); Dr CIRO, Pinto (Cambridge University)

Presenter: NOWAK, Michael (Washington University in St. Louis)

Session Classification: POSTER SESSION