The environment of GRS 1915+105 as seen with the Chandra HETG and RXTE

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[Contributed talk, 15min.]

Abstract

A *Chandra* AO1 30ks HETGS observation of the micro-quasar GRS 1915+105 reveals neutral K absorption edges from iron, silicon, magnesium, and sulphur, as well as ionized resonance lines from H- and He- like species. We attribute the large column densities derived from the edges to be due to surrounding cold material associated with GRS 1915+105, and the ionized features to orginate in a hotter disk/disk-wind/corona environment. Based on the H- and He-like Fe (XXV, XXVI), we estimate contraints on the ionization parameter, temperature, and hydrogen equivalent number density. Variability will be addressed in the context of simultaneous *RXTE* and *Chandra* observations.

CATEGORY: BLACK HOLE AND NEUTRON STAR BINARIES