Spin and Accretion

- Modeling IMBHS—ancient, low-mass black holes that may still exist in the local universe.
- Aiming to refine the census of black hole populations and improve our understanding of how the first black holes grew.
- Bridging cosmological simulations and spectral modeling to predict observable signatures of relic BHs
- Exploring how black hole spin, accretion rate, and surrounding gas metallicity influence X-ray and optical emissions
- Using the Cloudy code to simulate spectra of relic BHs under various physical conditions.