

## **Radio Spectra of Luminous, Heavily Obscured WISE-NVSS Selected Quasars with Young Radio Jets**

Young, compact radio sources associated with accreting supermassive black holes represent an essential phase in the life cycles of jetted AGN for understanding AGN triggering and duty cycles. In this talk, I present radio spectra for a sample of distant ( $z \sim 0.5-3$ ) heavily obscured quasars which have sub-galactic, young radio jets. Our sample selection identified optically faint but MIR-bright WISE quasars with a luminous ( $L_{1.4 \text{ GHz}} \sim 10^{25} \text{ W Hz}^{-1}$ ) radio source that is unresolved by NVSS ( $< 45''$ ). Our followup high-resolution VLA imaging have revealed compact, sub-arcsecond-scale radio morphologies ( $< 1.7 \text{ kpc}$  at  $z \sim 2$ ) for about 55% of our sources. The spectra presented here are carefully constructed from our own 10 GHz observations and archival radio survey data, which together yield 6-11 flux density measurements spanning 0.1-10 GHz frequencies. Our analysis shows that 63% of the sample exhibit either peaked or curved radio spectra, and 37% are classified as Gigahertz Peaked Spectrum (GPS) sources. This strongly indicates compact emission regions likely arising from recently triggered radio jets. Overall, this study provides a foundation for combining multi-frequency and mixed-resolution radio survey data for understanding the impact of young radio jets on the ISM and star formation rates of their host galaxies.