

Infrared properties of faint radio galaxies

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Abstract: The most recent radio surveys and multiwavelength follow-up observations have revealed a complex picture for the faintest radio galaxy population observed. At the limit of the current radio telescopes capabilities, most sources are either starforming or AGN galaxies, going through a substantial amount of evolution. The relative weight of these populations at the faint (sub-mJy) radio flux level is still largely unknown, as is the mechanism responsible for the radio emission in these different populations. Also, recent results indicate that ultra high redshift galaxies will also be detected at these faint radio flux levels.

By using recent mid- and far-infrared observations of some of the most extensively studied regions in the sky, and in preparation for the next generation of whole-sky radio surveys, the student will look at the infrared properties of this population, trying to estimate the relative weight between star formation and AGN processes in these sources.