

Low power radio-detected narrow line Seyfert 1 galaxies in low frequency radio surveys

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Narrow line Seyfert 1 galaxies are found to host powerful relativistic jets. Consider their relatively low black hole mass and high accretion rate, they could play an important role to understand the formation and the evolution of AGN jet. In this talk, I introduce our recent works on NLS1s with the data of new low frequency radio surveys. We compared the jet-disk connections between NLS1s and other jetted AGNs, and found NLS1s show higher jet production efficiency than typical FR II radio galaxies and FSRQs. In addition, we found a sample of NLS1s with much lower radio luminosity in the catalog of LOFAR Two-metre Sky Survey. Interestingly, they follow similar jet-disk connection with their brighter counterparts, as well as blazars. These low power NLS1s could be important on the evolved stage of jets. As the sensitivity get much better in SKA era, the low luminosity end of radio-detected AGNs may change our view of jet evolution and/or radio mode feedback intensively.

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