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## *Giant Double Radio Galaxies*

The web of galaxy clustering seen in the universe today is a stark contrast from its almost perfectly uniform beginning. Analyzing the clustering of radio sources plays a key role in studying these galaxy filaments. In 2006 Professor Rudnick and I began analyzing a sample of possible double radio galaxies. Each sample contained two radio sources separated by two or three arc minutes. By comparing low and high resolution radio images with optical images of each source we were able to determine if their radio structure showed evidence of being a double radio galaxy or not. A clear double radio galaxy consists of a bright center radio component coincident with an optical galaxy, and two large lobes of radio emission on opposite sides of the host galaxy. Through our analysis we confirmed our hypothesis that the number of true double radio sources is actually much smaller than the current statistics given in the literature. We found that ~11% of the sources were true double radio galaxies; the others were not physically connected, but still too close together to be purely coincidental. Taking a closer look at the true double radio galaxies we found that a small fraction of those could be considered giant double radio galaxies, which are defined to be larger than one mega parsec across. They are particularly interesting because of their size and rarity. I present here the giant double radio galaxies found in our sample, many of which have never been studied before.

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