OH Megamasers in Galactic Merging Regions KIRSTIN COOPRIDER, VICTOR MIGENES, Brigham Young University — OH Megamasers (OHM) very often appear in highly luminous infrared emission regions. One of these regions that are of great scientific significance is galactic mergers. OH masers are normally characterized by their presence in dusty star formation regions. However OH megamasers may not necessarily be represented only by their association with star formation, because of the possibility of a compact AGN. AGNs can also provide the driving mechanism for the masing process. Previously classified Starburst galaxies where OH masers are normally found, are now optically observed as AGN. OHMs may also be a reasonable judge as to the evolutionary stage of the merger. This project focuses on the radio observations that are part of a multi-frequency analysis of the merging regions surrounding the known OHMs. HI observations show where the gas is and help to determine the column density of the gas in the OHM regions. Hα maps the excited gas. Radio data will give position information of OHMS. Just as the environment provides a basis for the properties of the maser components, so do the maser components determine the properties of the environment.

Kirstin Cooprider
Brigham Young University