

# The 'full-strength' MALT45 - mapping the 45 GHz sky

- Shari Breen

“Dense gas across the Milky Way - the ‘full-strength’ MALT45”, will map 90 square degrees of the southern Galactic plane in a host of lines near 45 GHz, including CS, SiO and class I methanol masers, using the Australia Telescope Compact Array. Through these observations we will characterise the dense and shocked gas in a large portion of the Galaxy and directly test a number of theoretical predictions of high-mass star formation. Since our CS observations are sensitive enough to detect molecular clouds out to the far side of the Galaxy, we will also provide one of the clearest pictures of Galactic structure to date. In this talk I will describe the survey, present some of the data from the first year of observations and show some early science results.

*Galactic Scale*