Poster: Infall and Outflow Motions Towards a Sample of Massive Star Forming Regions

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Infall and outflow motions are an imperative part of the star formation process. In particular, we lack a clear understanding of how these processes change with evolutionary stage and how infall and outflow motions influence each other in the high mass regime. I will present results of a distance limited outflow and infall survey undertaken with the JCMT towards a sample of 31 MYSOs and ultra-compact HII (UCHII) regions drawn from the RMS survey (Cunningham et al. 2018 in press). We identify the presence of a young, active outflow from SiO (8-7) emission and use previous CO (3-2) data (Maud et al. 2016) to determine outflow properties. The infall motions and bulk properties of each region are determined from the HCO+/H13CO+ (4-3) emission. We compare both infall and outflow dynamics and properties with source evolution, mass, and luminosity. Active outflows are detected towards approximately 50

Outflows and Disks