Poster: Infall observations and modelling in massive star formation

- Jinjin Xie

An important aspect of understanding the process of star formation is identifying and studying the inflows which accumulate mass into the dense clumps and then into cores, and ultimately on the forming stars. Many studies have shown detections of infall spectral asymmetry towards low mass protostars, low mass starless cores, and young high mass sources and UCHII regions. With recently available numerical simulations from Smith et al. 2013, we studied the infall signatures in the massive sources from Spitzer Dark Cloud catalogue along with molecular line observations obtained from IRAM 30m, James Clerk Maxwell Telescope and Nobeyama 45m telescope. Our interests are in finding the most sensitive tracer of infall, distinguish the boundaries of infall areas together with the chemistry taking place in the infalling cores.

Galactic Scale