Poster: Infall signature in a intermediate mass pre-stellar core

- Yanett Contreras

Here we show ALMA observations toward a infrared dark massive clump and the physical properties of the it most massive embedded core. This core is relatively massive, subvirialized, and is barely affected by turbulence. Using the HCO+ (3-2) line, we find the first detection of infall signatures in a relatively massive, prestellar core with the potential to form a high-mass star. Our observations suggest that this core is rapidly collapsing and out of virial equilibrium, more consistent with competitive accretion scenarios rather than the turbulent core accretion model.

Cores and embedded objects