

## Star formation in the extreme galactic environments

Recently, observations of star formation has been revolutionized by the availability of observation platforms across the infrared to mm wavelengths. It has enabled us characterizing the star formation activities from the scales of individual protostars (0.1 pc) in the Galactic environments to the scales of molecular cloud complexes (100 pc MCCs) at distant extragalactic environments. MCCs are on one hand the building blocks of star-forming galaxies and on the other hands are the hosting sites of massive star formation.

By combining large scales dust continuum surveys mainly from Herschel, Spitzer with molecular line surveys from ground-based telescopes, we have resolved the structures, physical properties and star formation activities of the MCC in the Galaxy down to a great spatial and spectral resolutions. We are able now to investigate the dependency of star formation rates of MCCs on its mass and density. It turns out that star formation in the Galaxy are occurring mostly occurring in a few MCCs which are located at some extreme dynamical environments such as Bar-Arm junctions and other highly dynamical regions. There are a few clues that the strong dynamics of these places are responsible for the starbursts events in the Galaxy which make us term them as ministarburst. The ministarbursts turn out to be dominant structures of high- $z$  starbursts. We suggest that the differences in star formation rates between starburst vs normal galaxies or between ministarburst vs normal molecular cloud complexes are created by two different modes of star formation.