

## **Star Formation and Feedback in Nearby Galaxies: MUSE+ALMA+VENGA**

This project will involve using in hand ALMA CO(2-1) and MUSE optical IFU datasets on nearby ( $< 10$  Mpc) star forming disk galaxies (e.g. Leroy et al. 2016, Kreckel et al. 2016) to study the physics of star formation and feedback in the ISM. At these distances the  $\sim 1''$  resolution of the ALMA and MUSE data resolves the scales of GMCs ( $\sim 50$  pc) providing a detailed view of the processes that set the efficiency of star formation in the ISM. The project will involve using these datasets to study the origin of statistical trends and scaling relations seen in larger lower resolution datasets (e.g. VENGA, Blanc et al. 2013b). Possibilities involve studying the role of local gas dynamics, metallicity, and local radiation field, on the formation of molecular gas and the efficiency of star formation.

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