

Finding filaments in Galactic plane molecular clouds

尋找銀盤分子雲中的絲狀結構

Filaments are ubiquitous structures found in dense molecular clouds. Whether they are considered a mere result of turbulence upon cloud formation or the main channels along which mass is transported to compact cores, their nature and importance are not fully understood. In this project, we will attempt to identify filaments in a suitable set of clouds in the CO Heterodyne Milky Way Plane Survey (CHIMPS) and its follow-up CHIMPS2 by using filament-finding algorithms. We aim to study the distributions of filament size (in particular their width) in relation to the physical properties of molecular gas.

*This project will be supervised by Dr. Rani (rani@ntnu.edu.tw). Please contact through email directly.

*Some basic knowledge in astronomical observation and python programming is preferable. This project requires full commitment during the summer (July and August). Interested students and start as early as possible.