Kei Tanaka（Institute of Science Tokyo）

■ Title

The Battle between Accretion and Feedback in Massive Star Formation

■ Summary

Massive stars play a crucial role in shaping the universe, yet their birth mechanisms remain elusive. This program seeks to unravel how disk-mediated accretion can prevail over strong feedback processes during massive star formation. Utilizing high-resolution ALMA observations combined with advanced theoretical modeling, we will investigate the dynamical states of hot disks, ionized photoevaporation, and magnetohydrodynamic outflows. By examining the physical and chemical properties of gas and dust in hot environments with temperatures from 100 to 10,000 K, this study will offer insights relevant to fields such as rocky planetesimal formation and the study of active galactic nuclei. The anticipated Project Assistant Professor will play a key role in leading the analysis of ALMA data, contributing to publications, and advancing future research proposals.