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■Title

Planet Formation in Protostellar Disks: eDisk and Beyond

■Summary

This research program aims to understand how planets form in protostellar disks with the approved ALMA Large program, eDisk, as well as subsequent, follow-up observations. High-resolution ALMA observations have unveiled concentric ring/gap or spiral structures in a number of Class II disks with ages of 10 million years, which are signs of presence of planets. Recent ALMA observations have found that such structures are also present in protostellar disks with ages less than 1 million years. These results suggest that protostellar disks are likely the ongoing sites of planet formation. In this research program, we aim to obtain a comprehensive picture of planet formation with the ALMA large program approved under our international collaboration, eDisk, and the follow-up observations of the magnetic fields and ACA observations of protostellar envelopes. We will also develop analytical software tools for our project and open them to the entire community, which should contribute to further promotion of ALMA science in the entire community.