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The Structures of Embedded Disks with ALMA/the VLA

Class 0 & I protostellar disks are thought to represent early stages in the lifetime of disks, when they are still embedded in their natal envelope. As such, they provide an opportunity to study the initial conditions of protostellar disks, before any significant disk evolution or planet formation has occurred. We have conducted a survey of Class I protostars, initially with CARMA but now continuing with ALMA & the VLA, to study the structure of their disks and measure their masses. We fit detailed radiative transfer models to our sample and find that Class I disks have similar structure to Class II disks, including several Class I disks with gaps, cavities, and other interesting substructures. Our measurements show that Class I disks are, on average, more massive than the older Class II disks. As such, Class I disks may be a better representation of the initial masses present in protostellar disks. These samples are, however, still small, so we have begun an effort to model all 330 Class 0 & I protostars from the Herschel Orion Protostar Survey that were observed with ALMA as part of the VANDAM Survey. When completed, this study will produce a comprehensive picture of the youngest protostellar disks. We will finish by presenting early results from this effort, including our identification of several disks that are highly embedded and show additional interesting disk substructures.