

YSO disk structure and planetary signatures

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Detailed radial/vertical structure modeling of observations of disks in Young Stellar Objects (YSOs) can provide information on the physical conditions and on the characteristics of the gas and dust in their interiors. I describe recent results of self-consistent modeling of spectral energy distributions, optical and infrared images, and millimeter fluxes of YSOs. I discuss observations and interpretations of the different stages of planet formation, from the indications of dust growth and settling in the very young objects to the tens of AU size holes observed in young debris disks. I also discuss how the unprecedented resolution and sensitivity of ALMA may help us access the interior of the innermost disks, a region inaccessible with present day instrumentation, and witness the very first stages of planet formation.

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