

PROTOSTELLAR ENVIRONMENTS : Modeling of Disks and Envelopes

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Continuum emission at submillimeter and millimeter wavelengths is a powerful tool for detecting disks and measuring circumstellar masses. However caution is needed in interpreting the emission from protostellar sources because both the 'envelope' as well as the disk contribute to the continuum emission.

For various envelope models I describe the predicted behavior of the continuum emission including apparent source size and spectral index. The results show it should be possible to distinguish clearly between the envelope and disk components. The data currently available suggest that the envelope emission dominates at submillimeter wavelengths whereas disks become increasingly important at longer wavelengths.