Authors: R. L. Akesson (Interferometry Science Center, California Institute of Technology), G. T. van Belle (Jet Propulsion Laboratory, California Institute of Technology) and D. R. Ciardi, (University of Florida)

Title: Structure of the inner region of T Tauri circumstellar disks.

We present observations of several T Tauri stars using long baseline infrared interferometry from the Palomar Testbed Interferometer. The target sources, which include T Tau N, SU Aur and RY Tau, are all known to be surrounded by dusty circumstellar disks. The observations directly trace the inner regions (<1 AU) of the disk and can be used to constrain the physical properties of this material. For some of the sources observed, the size scale of the infrared emission is tenths of AU, which is considerably larger than predicted by flat disk models. We discuss these results in the context of recent theoretical work suggesting the presence of an extended vertical wall at the inner edge of the disk.

This work was performed at the Interferometry Science Center, California Institute of Technology and the Jet Propulsion Laboratory, California Institute of Technology.