Discovery of a halo around Herbig Ae/Be Stars

Siebenmorgen, R.[1], **Prusti, T.**[1], **Krügel, E.**[2], **and Natta, A.**[3]

[1] ISO Science Operations Centre, Astrophysics Division of ESA, Villafranca del Castillo, P.O. Box 50727, E-28080 Madrid

[2] MPIfR, Auf dem Hügel, D-5300 Bonn

[3] Osservatorio Astrofisico Arcetri, Largo E. Fermi 5, I-50125 Firenze

Abstract

We performed spectro–photometric imaging on intermediate mass pre-main sequence stars. We selected a sample of nearby Herbig Ae/Be stars. We discovered extended emission around most of our stars. The halo is dominated by small grain emission as is evident from our detection of strong PAH bands. The data are modeled by adjusting the PAH abundance in an optical thin circumstellar dust shell.