

## Hot Dust Around Warm Stars in the Trifid Nebula

B. Lefloch, Observatoire de Grenoble, BP 53, F-38041, Grenoble Cedex 9, France

*lefloch@obs.ujf-grenoble.fr*

J. Cernicharo, S. Pérez-Martínez, CSIC, IEM, C./ Serrano 121, 28006 Madrid, Spain

D. Cesarsky, K. Demyk, IAS, Bât. 121, Université Paris XI, 91450 Orsay Cedex France

L.F. Rodriguez, UNAM, Campus Morelia, A.P. 3-72, Morelia, México

The Trifid Nebula is a young “Pre-Orion” HII region, undergoing a burst of star formation. We report on mid-IR observations of the central region in the Trifid nebula, carried out with ISOCAM in the LW4, LW7, LW10 filters and in the low resolution spectroscopic mode provided by the circular variable filter. Analysis of the emission indicates the presence of a hot dust component (500 to 1000 K) and a warm dust component at lower temperatures ( $\sim 150 - 200$  K) around several members of the cluster exciting the HII region, and other stars undetected at optical wavelengths. Complementary VLA observations suggest that the mid-IR emission could arise from a dust cocoon or a circumstellar disk, evaporated under the ionization of the central sources and the exciting star of the nebula. In several sources the  $9.7\mu m$  silicate band is seen in emission. Around one young stellar source we found the presence of crystalline silicates in the circumstellar dust.