

Name of research institute or organization:

**Centro per l'Astronomia Infrarossa et lo Studio del Mezzo
Interstellare**

Title of project:

TIRGO

Project leader and team:

Prof. Gianni Tofani

Project description:

The year 2001 was characterised by the final implementation of the new mid-IR camera TIRCAM2. This camera is based on a 128x128 pixel array sensitive between 2 and 26 micron over a field of view of 74x74 arcsec. Its performances permit a full use of the unique properties of the Gornergrat site in terms of low temperature (reducing the disturbing emission from the background) and low water vapour content (making the atmosphere particularly transparent). The camera is now publicly available.

The observations with the other instruments (the near-IR camera ARNICA, the fast-photometer FIRT and the long-slit spectrometer LONGSP) are very active. As an example, the long term project of lunar occultations have reached the world record of 400 recorded events. All the ARNICA images and the LONGSP spectra, available to the astronomical community after a proprietary period of one year, now can be automatically downloaded from the web site: <http://tirgo.arcetri.astro.it>

Key words

infrared astronomy, infrared instrumentation

Collaborating partners/networks:

Several Italian institutions are collaborating with us in the development of new instruments: among the others, the Turin Astronomical Observatory and two institutes of the CNR located in Rome, IAS and IFSI.

Scientific publications and public outreach 2001:

Richichi, A.; Calamai, G.: *Infrared high angular resolution measurements of stellar sources. V. Angular diameters of ten late-type stars, in press.*

Masetti, N., et al: *GRB010222: Afterglow emission from a rapidly decelerating shock* 2001, A&A 374, 382

Carraro, G.; Hassan, S. M.; Ortolani, S.; Vallenari, A.: *An optical and near IR study of the old open cluster NGC 2141*, 2001, A&A 372, 879

Moriondo, G., et al.: *Near-infrared observations of galaxies in Pisces-Perseus. IV. Color maps of 41 cluster spirals*, 2001, A&A 370, 881

Mannucci, F.: *The TIRGO telescope*, presentation at the Italian Nation Congress on Infrared Astronomy, Perugia, 4-7 Dec. 2001

Address:

On 2002, Jan, 1st, the institute has changed its name to:

Istituto di Radioastronomia, sezione di Firenze

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URL: www.arcetri.astro.it/irlab/tirgo: Tirgo home page

tirgo.arcetri.astro.it: Tirgo data archive