

Name of research institute or organization:

CNR, Istituto di Radioastronomia (IRA), sezione di Firenze

(from 2005 January 1st the IRA institute is part of INAF, *Istituto Nazionale di Astrofisica*)

Title of project:

Italian national infrared telescope TIRGO

Project leader and team

Prof. Gianni Tofani, director of the institute

Dott. Enzo Natale, director of the department

Dott. Filippo Mannucci, TIRGO supervisor

Project description:

The TIRGO telescope is an Italian national facility for infrared observations. In the near-infrared wavelength range (1-2.5micron) both images and spectra can be obtained by the camera ARNICA, while the camera TIRCAM2 allows observations in the mid-IR regime (3-20 micron).

During 2004 TIRGO has a reduced activity as, during the last months, ARNICA is used as test instrument for the construction of the Large Binocular Telescope. Nevertheless a long-term project about the structure of several types of local galaxies continued to get data. These images are important to study the formation and the evolution of the two main parts of the galaxies, the *disk* and the *bulge*, and their mutual relations.

Key words:

infrared astronomy, infrared instrumentation

Internet data bases:

<http://www.arcetri.astro.it/irlab/tirgo>: TIRGO web pages

<http://tirgo.arcetri.astro.it>: publicly accessible archive of all the data taken at the TIRGO telescope

Collaborating partners/networks:

several italian institutions are collaborating with IRA 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 2004:

Refereed journal articles

Hunt, L.K., Pierini, D., Giovanardi, C. Near-Infrared observations of galaxies in Pisces-Perseus. V: On the origin of bulges, *A&A*, **414**, 905, 2004.

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