



The NASA Infrared Telescope Facility: A Dedicated Telescope for Planetary Astronomy

A.T. Tokunaga, S.J. Bus, M.S. Connelley, and J.T. Rayner

Institute for Astronomy, University of Hawaii, Hawaii, USA (tokunaga@ifh.hawaii.edu / Fax: +1-808-988-3893)

Abstract

The NASA Infrared Telescope Facility (IRTF) is a dedicated 3.0-m infrared telescope for planetary science. It is located at the summit of Mauna Kea on the island of Hawaii. Important capabilities of the IRTF include: (1) Remote observing from any location, including Europe; (2) Instrument changes during the night can be accommodated; (3) Observing periods as short as one hour can be scheduled; (4) Daytime observing is supported; and (5) Unique instrumentation for planetary science are available. Providing ground-based support of planetary missions is the main objective of this facility.

Instrumentation

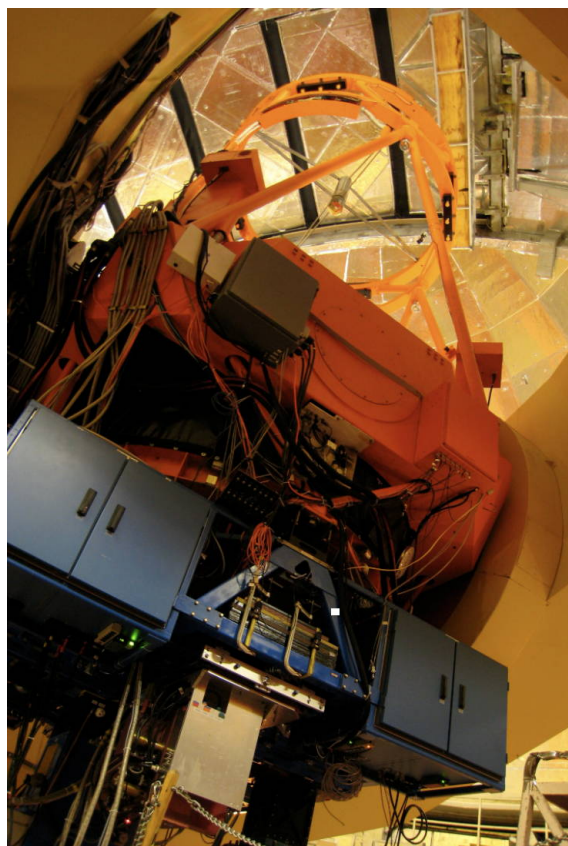
Facility instruments include SpeX (a 1–5 μm imager and low- to moderate-spectral resolution spectrograph), CSHELL (a 1–5 μm high-spectral resolution spectrograph), NSFCAM2 (a 1–5 μm camera with narrow-band imaging capability), and MIRSI (an 8–25 μm camera with narrow-band imaging capability).

Current efforts aimed at expanding these observing capabilities include (1) upgrading the arrays and array controllers in both SpeX and NSFCAM2 to help improve their sensitivities, (2) development of iSHELL (a 1–5 μm high-resolution, cross-dispersed spectrograph that will replace CSHELL), and (3) commissioning of MORIS (a CCD camera attached to SpeX that allows simultaneous visible-wavelength imaging with near-infrared imaging or spectroscopy).

Visitor instruments such as TEXES (an 8–25 μm high-resolution spectrograph) and other 10 μm spectrographs are available.

Applying for Telescope Time

Due dates for proposals are 01 April and 01 October of each year for the August–January and February–July



time periods using the on-line application form at our web site.

Further information can be obtained at:

<http://irtfweb.ifa.hawaii.edu>

Acknowledgements

The NASA Infrared Telescope Facility is operated by the University of Hawaii under Cooperative Agreement no. NNX-08AE38A with the National Aeronautics and Space Administration, Science Mission Directorate, Planetary Astronomy Program.