

Astronomy with CFHT

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The scientific capabilities of the Canada-France-Hawaii Telescope (CFHT) will be briefly reviewed. The CFHT is a 3.6m aperture telescope situated near the summit of Mauna Kea at an altitude of 4200m. It offers a suite of facility instruments that provide outstanding capabilities for the study of a broad range of astronomical problems. The primary instruments for dark time use include CFHT12K, a wide field CCD imager used at prime focus, and MOS/OSIS, two imaging spectrographs, with multislit capabilities, at Cassegrain focus.

For bright time use, the main instrument is the Adaptive Optics Bonnette used mainly in the infrared with the 1kx1k KIR detector. This permits diffraction limited imaging with natural guide stars. We are about to commission a second 1kx1k detector (CFHTIR) for imaging at Cassegrain and also for use with OSIS to provide infrared spectroscopic capability. A coude spectrograph, Gecko, is also available. The capabilities of these instruments will be illustrated with examples of science programs carried out at CFHT. Finally, some discussion of future instruments and the possible evolution of CFHT will be presented.