The Environments Of Nearby Stars As Observed By NICMOS

Bradford A. Smith; University of Hawaii
Glenn Schneider; University of Arizona
Eric Becklin; University of California, Los Angeles
Alycia Weinberger; University of California, Los Angeles
Patrick Lowrance; University of California, Los Angeles
Dean Hines; University of Arizona
Richard Terrile, JPL

We have used NICMOS (the Near-Infrared Camera and Multi-Object Spectrometer) on the Hubble Space Telescope in its coronagraphic mode to investigate the close environments of nearby stars. Our program included searches for circumstellar disks and for low mass objects such as brown dwarfs and giant Jupiters. As of the time of abstract submission, we have announced the discovery of one brown dwarf and two circumstellar disks, one in the form of a narrow ring and the other showing a narrow annular minimum in surface brightness situated far from the star. The observed structure of both of these circumstellar disks suggests the influence of planetary bodies. We report here on the latest results from our EONS (Environments of Nearby Stars) program.