Subaru Coronagraphic Search for Proto-Planets

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CIAO (Coronagraphic Imager with Adaptive Optics) for the Subaru Telescope has great sensitivity for faint objects in close vicinity of a bright object. The object which is 10 magnitudes fainter than the primary and is located at 0.5 arcsec from the primary can be detected with 0.1 arcsec resolution. We have carried out coronagraphic search for extra-solar planets, proto-planets, and proto-planetary disks during comissioning run.

Coronagraphic images of GG Tau have better spatial resolution and higher signal-to-noise ratio than near-infrared images of the Hubble Space Telescope. We will present coronagraphic images of GG Tau and other proto-planetary disks and proto-planets around T Tauri stars.