

Observational Studies on Planet Formation with Subaru Telescope: From Protoplanetary Disks to Extrasolar Planets

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<http://pavane.mtk.nao.ac.jp/~hide/hide.html>

After a long construction period, the Subaru 8.2 m optical-infrared telescope has just received its "astronomical first light". The main features of the Subaru Telescope are its high sensitivity and high resolution. In particular, the infrared wavelengths are considered to be very important because of the availability of adaptive optics technique. Therefore, the Subaru Telescope is expected to play a leading role in studies on star and planetary formation that require detailed infrared observations. In this talk, I will review previous observations and discuss the planned observations with the Subaru Telescope regarding the structure and evolution of protoplanetary disks and direct observations of extrasolar planets and brown dwarfs.