
Mid-IR characterization of substellar companions with CanariCam

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Abstract

Direct detection of extrasolar planets is the only technique that provide a completely characterization of their physical properties. Since the first unambiguous direct detection of a planetary mass companion around the brown dwarf 2MASSJ1207-3932 (Chauvin et al. 2004), several low-mass substellar companions have been found. Here we present mid-IR observations in the 8.7 micron band with the CanariCam instrument at the GTC of four of these systems: DF Tau, FU TAu, GJ 758 and kappa And. We will show the detection of some of the substellar objects and set upper limits to the 8.7 micron emission of the others. These mid-IR images of known substellar companions allow us to constrain their temperature and the presence of mid-IR excesses due to disks.

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