

GQ Lup B Optical and Near-Infrared Photometry: A Surprising Planetary Mass Object/Brown Dwarf!

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I will discuss our re-analysis of archival HST WFPC2 and NICMOS images and Subaru CH4L, Ks and L' data of the recently discovered planetary mass companion GQ Lup B. With these we produce the first R and I band photometry of the companion, we fit a radius and effective temperature using detailed model atmospheres and find an unexpected result for the candidate radius. An estimated mass is then obtained using the GAIA dusty models. Finally, evidence of accretion is detected: GQ Lup B might be strongly accreting and still be in its formation phase. If the accretion is confirmed, GQ Lup B would become a central point of interest to study a planetary mass object in formation.