

# Discovery of Qatar 6-b Exoplanet

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Abstract : We present the discovery of the Qatar-6b exoplanet as a result from the Qatar Exoplanet Survey (QES). Qatar-6b exoplanet is a hot Jupiter – a very large gas planet, very close to its host star. The orbital period of the planet is  $P = 3.5058$  days and the planetary radius and mass is  $R_p = 1.35 R_j$  and  $M_p = 0.76 M_j$  respectively. The host star physical parameters are  $R_{star} = 0.87 R_{sun}$  and  $M_{star} = 0.84 M_{sun}$ . We confirm this important discovery, by using data from QES, for 0.5m Qatar Follow-up Telescope (New Mexico USA) and 1.2 FLWO telescope at Mt. Hopkins observatory (USA).