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TROY – The Search for Exotrojan Planets.

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Abstract

As the field of extrasolar planets evolves with numerous discoveries of new and diverse planets, we can start thinking in more challenging (observationally speaking) scientific cases that can bring up new, hidden pieces of the exoplanetary science puzzle. This is the case of the TROY project, a multi-technique effort to look for the first co-orbital planets and to provide estimates of the occurrence rate of these bodies down to the Earth-mass regime. Despite being missed in our Solar System, where only kilometer-size (or smaller) bodies co-rotate with most of the planets, theory allows even equal-mass planets to co-exist in the same orbit. In this poster I present the news on the TROY project including the last ground-based observations, the results from the first radial velocity search involving 46 planetary systems and the first results from our Kepler/K2 search. (See poster).

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