Formation and evolution of planetary systems: what have we learnt from transit methods?

Clément Baruteau

1Institut de Recherche en Astrophysique et Planétologie (IRAP) – CNRS : UMR5277 – France

Abstract

Planetary astrophysics is undergoing an epoch of explosive growth, driven by the discovery of over a thousand exoplanets in less than two decades. CoRoT, Wasp and Kepler have not only emphasized the amazing diversity of exoplanetary systems, they have largely contributed to increasing their statistics, which allows to test theories of planet formation and evolution. In this communication I will review and discuss what constrains exoplanet detection by transit methods has brought to our understanding of how planetary systems form and evolve.