

Searching for additional companion to WASP planets

M. Neveu (1), D. Queloz (2) and A. H. M. J. Triaud (3)

(1) Observatoire de Geneve, Ch des Maillettes 51, 1290 Sauverny, Switzerland (marion.neveu@unige.ch), (2) Institute of Astronomy, University of Cambridge, Madingley Road, Cambridge CB3 0HA, UK, (3) Kavli Institute for Astrophysics & Space Research, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

Abstract

Since 2007 an intense follow up is established with the spectrograph CORALIE to observe WASP transiting candidates. In parallel a special effort has been carried out to keep observing them to look for long-term radial velocity variabilities suggesting the presence of additional stellar or planetary companions.

Hot Jupiter planets are special objects that challenge planets formation mechanisms. It is currently thought that only violent mechanisms related to planet interactions and dynamical secular effects from another companion may explain the emergence of such objects. Thenceforth, we should observe an unusual rate of companions in these systems. Preliminary results from the program will be presented, related to the statistics of companions around WASP planets.