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Institution: Institute for Astrophysics, Göttingen University
Title: Populating the mass-radius diagram using TTVs

Type: Poster

Session: Multiple Planets and Multiple Star Systems

Abstract: Transit timing may allow the confirmation of planetary candidates as true planets, and sometimes even

the determination of the masses of the planets from photometry alone. We present our analysis of a number of multi-transiting Kepler systems. We help increasing the (small) number of low-mass planets

with

significantly determined masses and radii, including some planets that are in rather empty regions of the parameter space. We discuss some caveats of TTV analysis related to the use of TTVs for long-period planets and for long-interaction-time planets, especially as these caveats had already led to well-

published but wrong results.