
Transit timing variations in Kepler's data

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Abstract

We present several transit timing variations (TTVs)-related works:

1. On mis-interpretation of TTVs: A significant revision of the prototypical Kepler-9 system using six times more data.
2. A new approach to TTVs detection that is not biased to long-period and deep-transits planets. I show results of applying this technique to all Kepler candidates, and the detection - not possible using conventional techniques - of new TTVs-bearing systems in dynamically-interesting configurations.
3. Presenting "KOINet" - a new and global network of medium-class telescopes aimed at resolving unsolved TTVs-bearing Kepler systems.

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