Using secondary eclipses to probe the eccentricity distribution of Kepler planet candidates

Parviainen Hannu^{*1} and Suzanne Aigrain¹

¹Oxford Astrophysics – The Denys Wilkinson Building, Keble Road, Oxford OX1 3RH, United Kingdom

Abstract

We present the results of our search for secondary eclipses in the Kepler light curves with a main emphasis on probing the eccentricity distribution of the Kepler planet candidate population. The search approach is based on Bayesian model selection and utilises Gaussian Processes to model correlated noise, and a special attention is given to the effects from correlated noise and random events.

*Speaker