Bayesian Extra-Solar Planet Detection

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Abstract

This year saw the publication of my book (Gregory 2005a), "Bayesian Logical data Analysis for the Physical Sciences; A Comparative Approach with *Mathematica* Support." The accompanying *Mathematica* software contains a variety of tools for data analysis. My presentation will illustrate one application of the book's software to the problem of extrasolar planet detection (Gregory, 2005b).

References:

[1] P. C. Gregory (2005a), *Bayesian Logical Data Analysis for the Physical Sciences: A Comparative Approach with Mathematica Support.* Cambridge University Press. http://books.cambridge.org/052184150X.htm

[2] P. C. Gregory, *A Bayesian Analysis of Extrasolar Planet Data for HD 73526.* Astrophysical Journal (submitted 2005b, available from my web site)

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