
Model fitting by phase matching - theory and application to CoRoT and Kepler stars

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Abstract

We show that the inner phase shifts, the departure of the eigenmodes from a simple harmonic function, of model stars collapse to a single l independent function of frequency in the outer layers of the star. We then show how to find a best fit model to an observed frequency set by calculating the inner phase shifts using the observed frequencies and determining the extent to which these collapse to a single function of frequency in the outer layers of the model. We apply this technique to find models of some stars observed by CoRoT and Kepler

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