introduction

Stellar interiors are not directly observable, with the exceptions that the neutrinos emitted in the solar centre can be detected on Earth and that vibrations of the solar surface can provide information using techniques similar to seismology.



Figure 1: Schematic showing the the interior of the Sun.

So how can we learn about stellar interiors to the level of detail depicted in figure 1?

We can only do this by constructing models of stellar interiors, based on the laws of physics applied to the materials known to be present in stars. The predictions of these models can then be tested by comparison with the observed properties of individual stars and the correlations between these properties exhibited by large groups of stars.

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