
Red giant oscillation spectra in control

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Abstract

CoRoT and Kepler allow us to decipher the finest details of the red giant interior structure. The frequency differences between consecutive radial modes provide the measurement of the mean stellar density; we now measure the modulation of the radial mode oscillation pattern and attribute these features to sharp structure variations inside these stars, related to the second ionisation of helium. The period spacings between consecutive dipole mixed modes provide the measurement of the core size; we now automatically measure the period spacing of gravity modes. This provides the most precise information on the evolutionary status of 12k stars and allows us to perform the automated measurement of rotational splittings. The methods will be briefly presented; the poster presented will focus on the results in terms of stellar evolution.

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