Testing the ν_{max} scaling relation H. R. Coelho, W. J. Chaplin, S. Basu, A. Serenelli

Abstract

By using asteroseismology, it is possible to estimate global stellar parameters with a high degree of accuracy that would, otherwise, be difficult to obtain. Two key global seismic quantities are relevant to estimate the fundamental properties of a star: the frequency of maximun power (ν_{max}) and the large frequency separation ($\Delta \nu$). The focus of this work is to test the ν_{max} scaling relation in order to ascertain it's level of confidence. Here, we report our results using artificial and real Kepler data, based on a grid-modelling approach.