
Testing the scaling relation for the frequency of maximum power.

Hugo Coelho^{*1}, William Chaplin¹, Sarbani Basu², and Aldo Serenelli

¹School of Physics and Astronomy, University of Birmingham – Edgbaston, Birmingham B15 2TT, UK, United Kingdom

²Department of Astronomy, Yale University – 260 Whitney Avenue, New Haven CT 06511, United States

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 maximum power and the large frequency separation. The focus of this work is to test the scaling relation for the frequency of maximum power in order to ascertain its level of confidence. Here, we report our results using artificial and real Kepler data, based on a grid-modelling approach.

^{*}Speaker