

Title: Seismic study of the δ Scuti star 38 Eri

Authors:

- Luka TRUFFERT-TKALAC
- Daniel Roy REESE
- Louis MANCHON

Abstract: 38 Eri is a δ Scuti star with a projected equatorial velocity of nearly 100 km s^{-1} . Its oscillations have been observed by various ground-based instruments as well as the MOST satellite, thus yielding their amplitudes and phases in different photometric bands. We then compare the resultant amplitude ratios and phase differences with theoretical predictions based on 2D rotating models and 2D oscillation calculations in an attempt to identify the modes. This enables us to constrain the fundamental parameters of the star, namely mass, radius, inclination, rotation rate, and possibly the stellar age.