
beta Cas and HD 41641 - two magnetic delta Scuti pulsators?

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Abstract

The F2 star beta Cas is reported to be a radial delta Scuti pulsator with a single pulsation period of 2.5 hours that has already evolved towards the Terminal Age Main Sequence. BRITE-Constellation has observed beta Cas in two filters and we identified two close frequencies whose difference corresponds to the rotation period determined from interferometry. Spectropolarimetry indicates the presence of a magnetic field. The question is whether beta Cas is indeed a pulsator or if the two frequencies are "only" connected to the rotation period and the magnetic field.

HD 41641 is a delta Scuti pulsator discovered and observed with CoRoT for which we found a chemical abundance pattern that resembles the rare earth anomaly in roAp stars. We are now investigating the presence of a magnetic field.

The latest results on these two stars will be shown and their interpretation is open for discussion.

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