
Magnetic field structure in single late-type giants: The fast rotator FI Cnc

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Abstract

We present a study of the 2.4 Msun giant FI Cnc, which is at the base of the red giant branch. We use spectropolarimetric data obtained in two sets (2013 and 2015) with Narval @ TBL, Pic du Midi Observatory, France. Employing ZDI technique, we are able to reconstruct the first map of the global surface magnetic field structure of the star. In addition, we measure the line activity indicators and BI (average longitudinal magnetic field via LSD method) and compare their behavior with time. FI Cnc shows clear evidences that its magnetism is due to dynamo.

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