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High speed photometry of a pre-main sequence star HD 68695 using the Mahikeng Astronomical Telescope (MAT)

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HD 68695 is a well known pre-main sequence star with well established infrared excess and emission in its hydrogen lines. In this paper we show for the first time that this star pulsates with periods around 23 minutes and the main amplitude of 3 mmag. We present the data collected using the new Mahikeng astronomical Observatory which confirms the frequencies that are found in the KELT data in Sutherland. We show that the MAT is capable of producing photometric data with noise levels of less than 2 mmag. This makes the MAT not only an ideal instrument for performing photometry of pulsating stars, but also a very useful tool in the search and study transits of exoplanets.

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