

Abstract Submitted
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Kepler K2 Observations and Modelling of Algol-type binary KIC201325017 JOHN JONES, RICHARD OLENICK, ARTHUR SWEENEY, University of Dallas — We present results from long cadence *Kepler* K2 observations covering 64 days of the new Algol-type variable KIC 201325107 also known as LINEAR 2882780. Using Peranso for time series analysis, we detect an orbital period of 0.07441 d and time varying maxima. We create a synthetic model of system using PHOEBE and find a mass ratio $q = 0.3493$, an orbital inclination $\theta = 83.29^\circ$, and temperatures of $T_1 = 6204$ K and $T_2 = 3816$ K for the primary and secondary stars, respectively. In addition, we find evidence for streaming of matter from the secondary to the primary.

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