

## Photometric Studies of the Triple Star ER Orionis

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Many filtered CCD measures of the over-contact binary ER Ori form the basis for new light curves including the first red one. From these measures new timings of minimum light have been calculated. The complex period variation can be sorted into a linear period improvement, a secular period increase of considerable magnitude, and a 50-year cyclical component. This latter is discussed in terms of a light-time contribution from a bound third star, which finds some support from Hipparcos results. The new light curves were synthesized by a familiar code and found to agree with all but one previous light curve which remains unique. Reasons are given to support the hypothesis that this divergence is not due to an intrinsic stellar change but to some presently unknown instrumental fault.