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EDGELESS STARS

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(1) *Introduction.* In the last three or four months there have appeared some new results in the study of the eclipsing variable stars, which seem to be gaining more and more importance. In order for the reader to understand this I should like to describe first the importance of the eclipsing variables for the study of stars in general and then proceed to the edgeless stars.

(2) *The Fundamental Parameters.* There are a few characteristics of a star which are fundamentally important, or at least considered fundamentally important; they are mass, radius and effective temperature. The eclipsing variables provide us with these characteristics. Through the eclipsing variables we think often about the stars in general. That is why the research on eclipsing variables has never ceased to be interesting, and valuable contributions are in progress in many countries all the time. It is with regret that the author can not discuss this general research on eclipsing variables. But space is limited

and the new results given here seem to have little connection with the general problems.

Since the time when the first spectroscopic binaries were found, it has been realized that the application of the law of gravity to the observed motions of the components in a binary would lead to the determination of their masses. Since, however, the tilt of the orbit of the spectroscopic binaries is undetermined, the spectroscopic observations alone give only the so-called minimum masses. If it happened that a spectroscopic binary is at the same time a photometric binary, we can do some additional computations. In such a case we see how one component covers the other, producing an eclipse. From the amount of the drop in brightness of the star we can estimate the tilt of the orbit. In other words, we can remove the indeterminacy inherent in the purely spectroscopic observations of a binary. That is why the eclipsing variables are very important. Through them we determine the

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