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The analysis of detached eclipsing binary stars is one of the most powerful ways to investigate the properties of individual stars. The study of light curves and radial velocity curves allows us to empirically determine masses and radii to accuracies of one percent or better. The resulting stellar dimensions can be used to investigate the physical processes which occur in single stars, by comparison with the predictions of stellar evolutionary models. This is particularly useful when one of the components of a detached eclipsing binary is a peculiar star.

The metallic-lined A-type eclipsing binaries WW Aurigae and GV Carinae (a member of the open cluster NGC 3532) have been analysed photometrically and spectroscopically to determine their absolute masses, radii and effective temperatures. This allows further investigation of the physical characteristics of Am stars.
