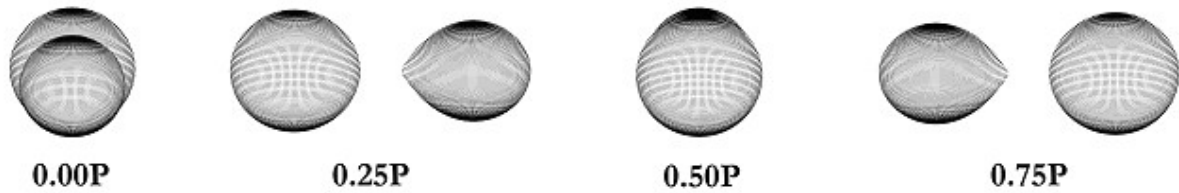




Normalization phase

The orbital phase of a binary is simply a means of describing the positions of the stars at any point within their orbit. The phase varies from 0.00 to 1.00, and is a fraction of the period (P) of the binary. The deeper eclipse (primary eclipse = hotter star eclipsed) is defined to be at phase 0.00 P , and secondary eclipse (secondary eclipse = cooler star eclipsed) for circular orbits is half way through the cycle or 0.50 P . The quadrature phases (when both stars are most visible) are naturally in between these two eclipse phases for circular orbits and are specified as 0.25 P and 0.75 P phase. These phase orientations are shown in the figure below.



MR Cyg shown at four phase orientations

The *Normalization Phase* is the phase at which you wish to exactly pin the synthetic light curve to your observed one. Any phase can be chosen, but usually one of the quadratures (0.25 P or 0.75 P) is chosen. This is entirely up to the user.