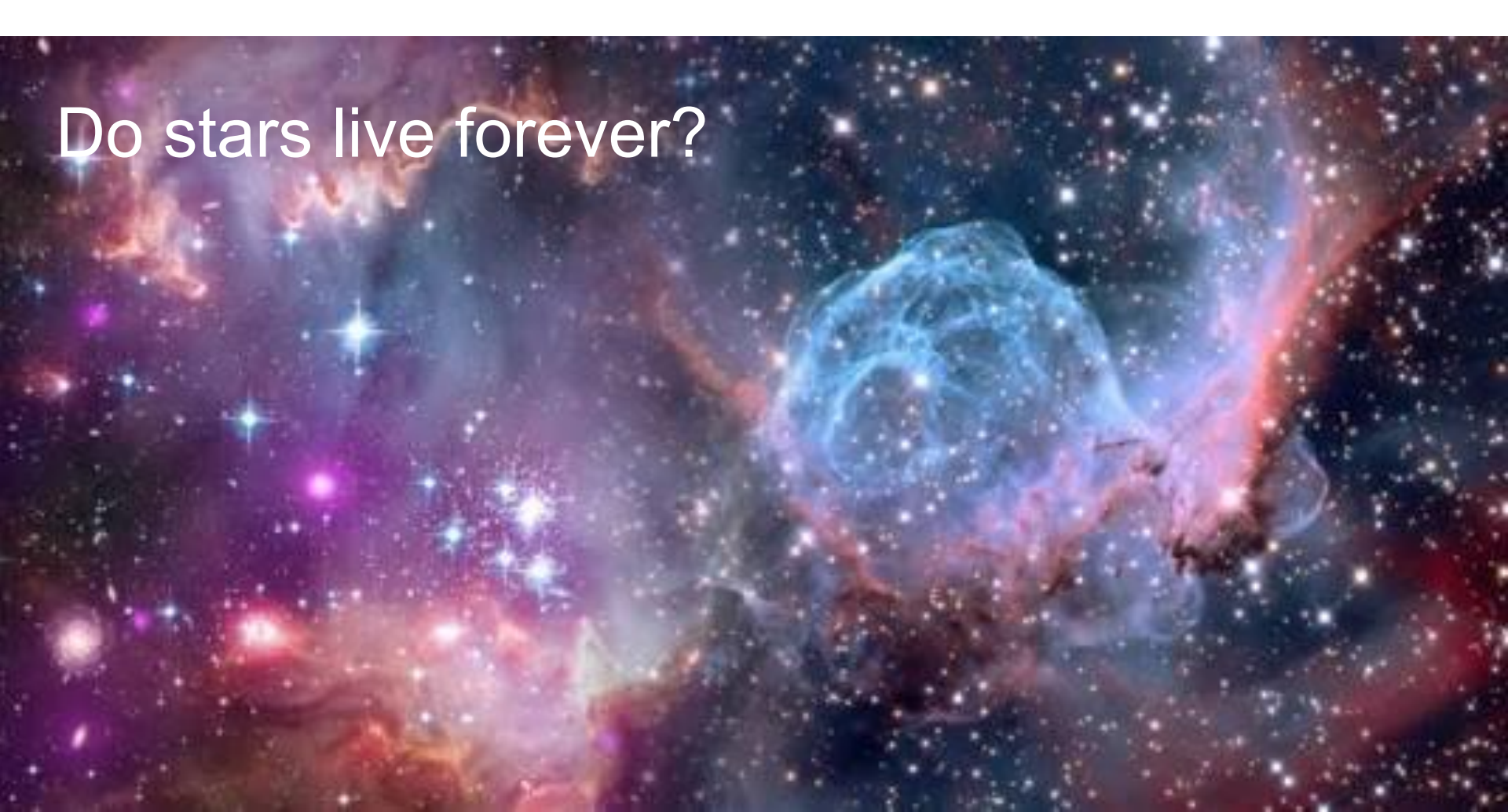




Variable Stars, Binary Stars

★ An introduction
★ Dr. Jielai Zhang
Schmidt Science Fellows

Do stars live forever?



Do stars live forever?

Do stars have the same brightness
throughout their lives?





Do stars live forever?

Do stars have the same brightness throughout their lives?

Why might the brightness of stars vary over time?

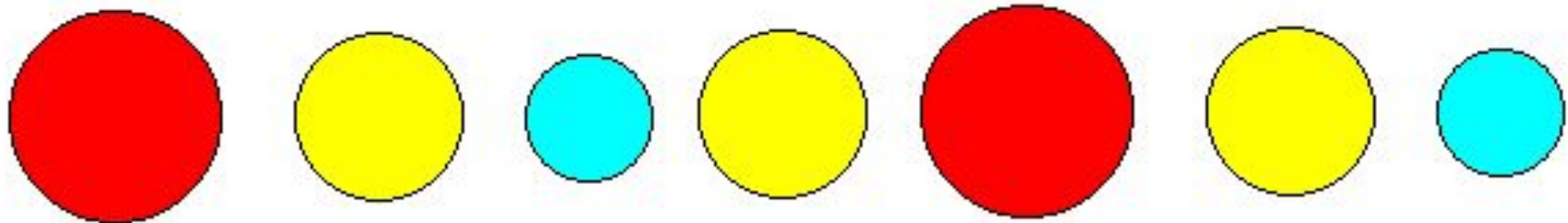
Mechanisms for periodic variables:

Star pulsates

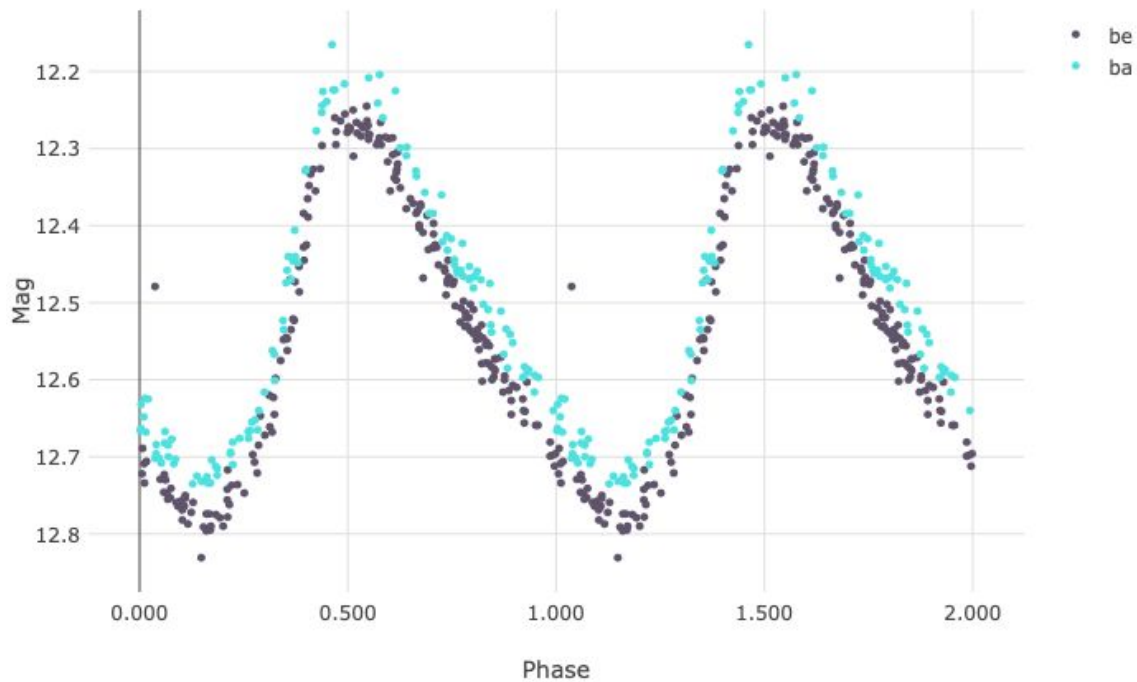
Star has dark spots on it and it rotates into and out of view

Eclipsing binary star system

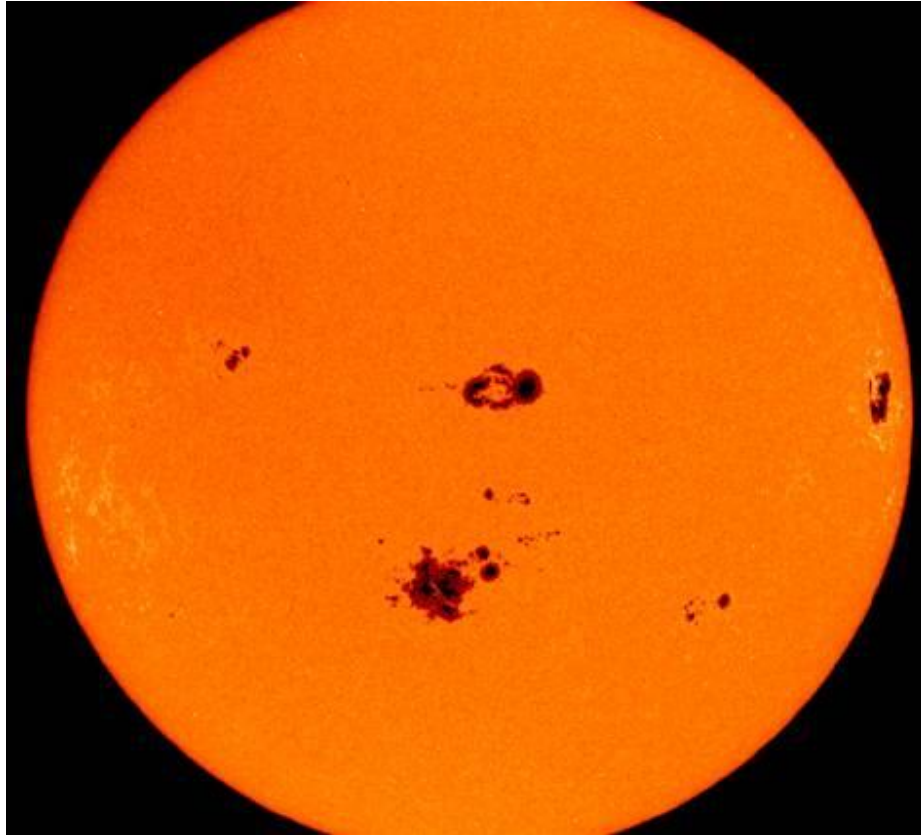
RR Lyrae



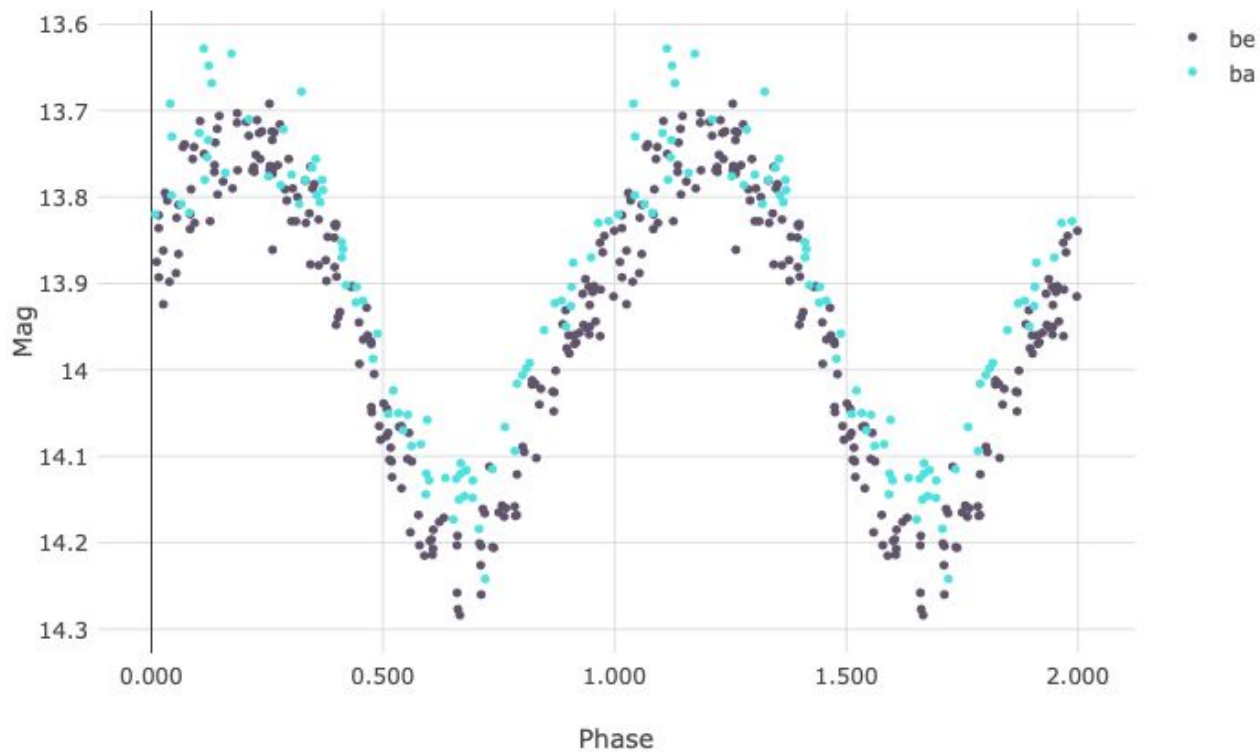
RR Lyrae



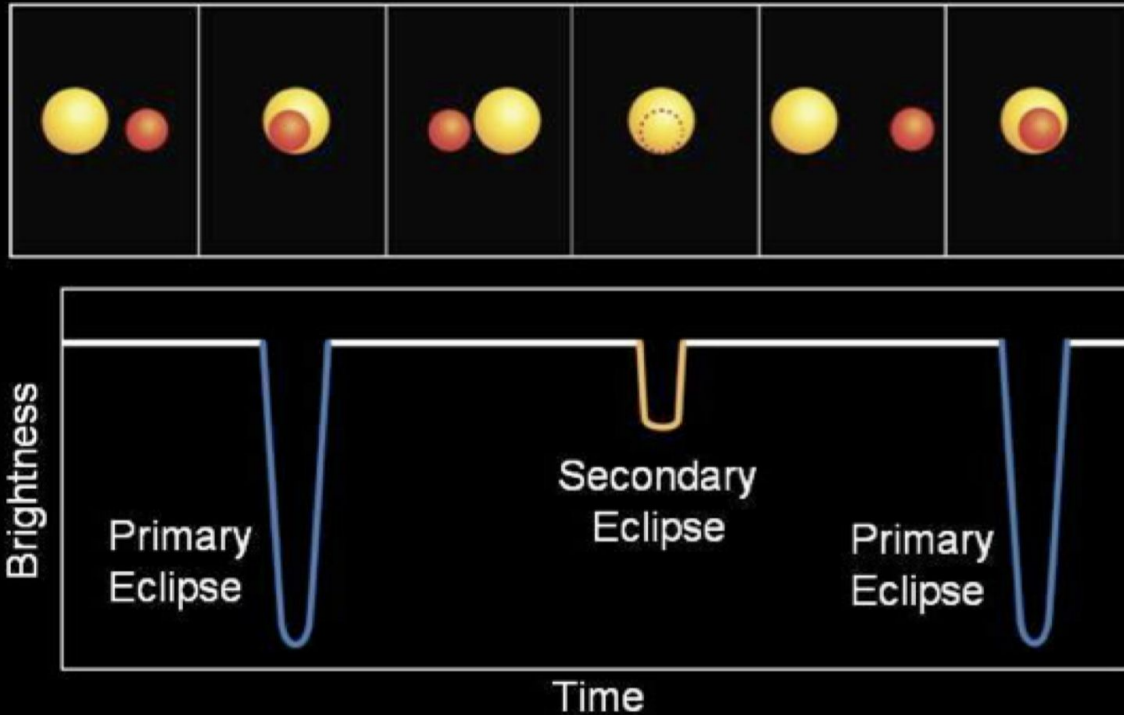
Rotational Variable



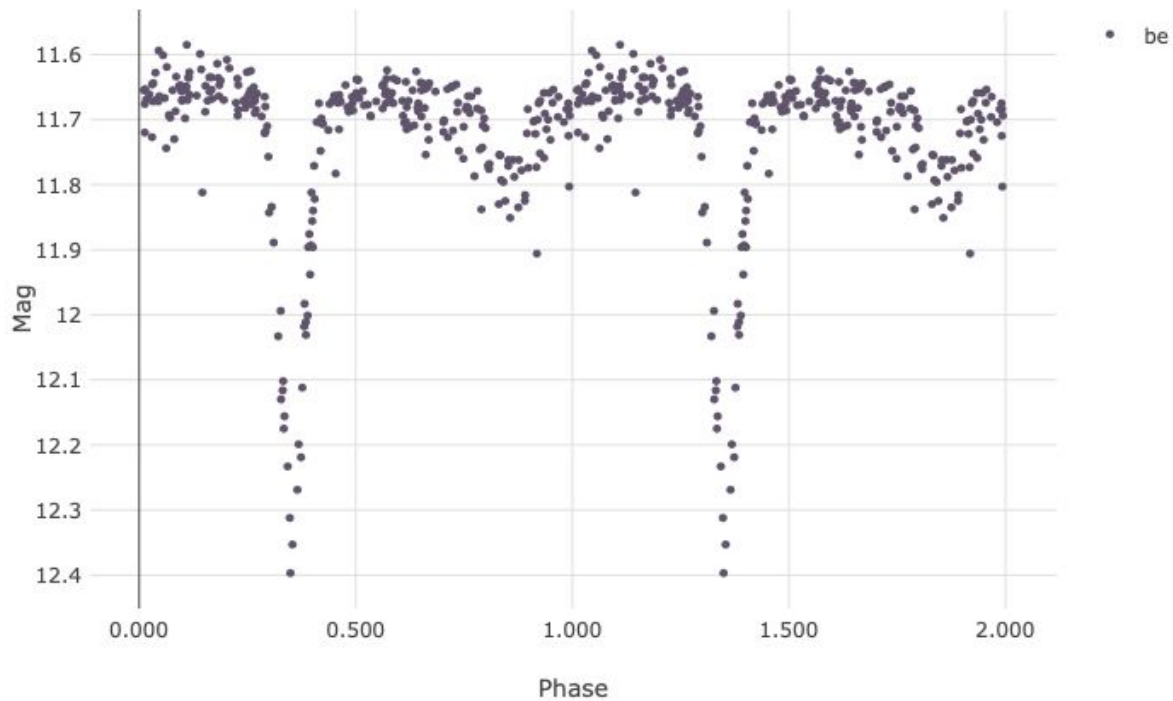
Rotational Variable



Eclipsing Binary Stars



Eclipsing Binary





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