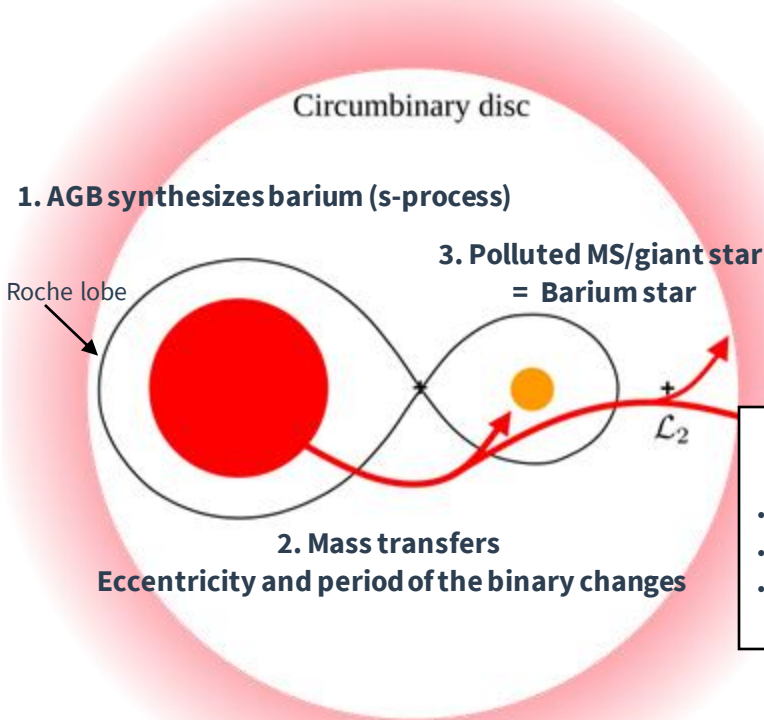
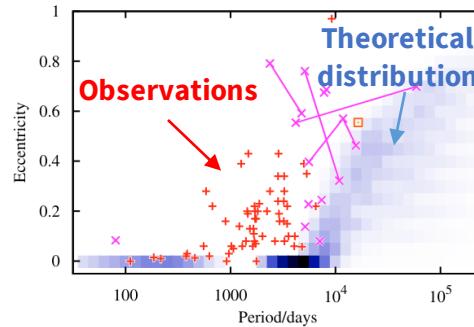


The role of mass transfers in shaping the orbits of barium stars

A. Formation of Ba stars



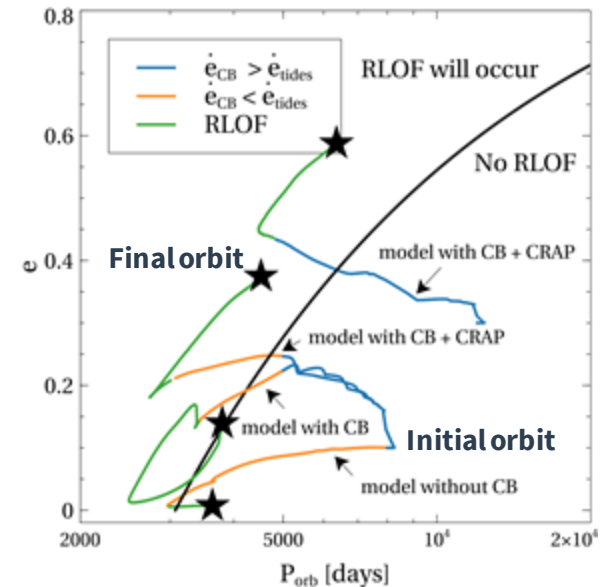
B. Current mass transfer models are unable to explain the orbits of Ba stars [1]



C. I simulate binaries in which I include 3 mass transfer mechanisms

- Wind Roche Lobe overflow (WRLOF)
 - Interaction with the Circumbinary disc (CB)
 - Tidally enhanced winds (CRAP)
- They produce shorter, more eccentric orbits

C. Start with a binary in an initial orbit, we follow the changes in orbit for the whole duration of the AGB phase



D. One surprising result !

- The mechanisms lead to the possibility of Roche Lobe Overflow (RLOF) on eccentric orbits, an otherwise unlikely scenario