

THE FORMATION OF HYDROGEN DEFICIENT STARS THROUGH COMMON ENVELOPE EVOLUTION

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I will discuss preliminary results on the detailed dynamics associated with common envelope evolution. In common envelope systems, a low-mass companions spirals into the envelope of a red giant or asymptotic giant branch star. By transferring the orbital energy of the binary and the angular momentum into the envelope, the envelope is often completely shed, leaving the companion in a tight binary or even merged into the core. I will present Smooth Particle Hydrodynamics (SPH) simulations of this dynamic event for different companion masses and shed some light on the detailed dynamics governing this event.