# Origin of Hydrogen-Deficient Post-AGB Stars: Late He Flash

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The H-ingestion flash occurs when H-rich material is mixed into convective He-burning, as for example in the very late thermal pulse in single post-AGB pre-WD that leads to H-deficient stars. I will describe this phenomenon, including some of the other astrophysical environments in which this convective-reactive event plays a role. Specifically I will argue that convective-reactive events can at this point in time not be predictively simulated in spherical symmetry. This will be demonstrated by presenting some initial 2D and 3D simulations of the VLTP. I will then - if time permits - briefly mention another phase of stellar evolution in which convective-reactive events may be important, and that also could lead to H-deficient stars: accreting white dwarfs at high accretion rates that are thought to eventually explode as supernova type Ia. This part of my presentation is meant to connect to the following talk by DeMarco. Last but not least I may very briefly present a preliminary post-double degenerate merger stellar evolution calculation that may nicely explain some observed features of HdC and RCB stars. These simulations are related to observational and theoretical work that will be presented by Clayton, Diehl and Fryer.