ACCRETING WHITE DWARFS: H AND HE NOVAE.

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Understanding the behavior of white dwarfs in interacting binary systems is critical to determining the rates of optical transients such as novae and type Ia supernovae, as well as the evolutionary pathways leading to these events. By incorporating the latest results from detailed models, we can study the impact of these works on the observable universe from a population statistics perspective, allowing us to compare our modern understanding of binary evolution against the reality of the observed rates of these transients. I will describe the overarching physical framework used in my recent population synthesis work on novae, and present several interesting insights into the lives of these systems.