

Krystian Łkiewicz - Population synthesis of classical novae population

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Cataclysmic variables (CVs) are interacting binary stars that consists of a degenerate white dwarf accreting mass from a normal star donor. Our understanding of evolution of such systems have been challenged by properties of their known population, such as white dwarf mass distribution, orbital period distribution and their space density. With the recent developments of population synthesis codes we are able to reproduce the CV population characteristics. However, there are still unsolved problems posed by the population of classical novae among the CVs, such as for example why there is only one system known to have both dwarf nova and classical nova outbursts. In my talk I will discuss the recent developments of population synthesis codes as well as my work on understanding of classical novae population using population synthesis.

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