The first volume limited sample of cataclysmic variables from $Gaia\ \mathrm{DR2}$

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Cataclysmic variables (CVs) are the best-suited laboratories in which to test the models of compact binary evolution as they are numerous, relatively bright, and both stellar components are structurally simple. A large and well-defined sample of CVs is fundamental to study the global properties of such stars and to critically test our understanding of the evolution of all types of binaries. However, until recently, all available CV samples were affected by strong selection biases. Only the advent of the second data release (DR2) of the ESA Gaia space mission has offered the unique opportunity to construct a volume-limited sample of CVs that can provide accurate constraints on the properties of their Galactic population. In this talk, I present the first population study of the 150 pc CV sample to accurately constrain their space density, the composition of the population as well as the white dwarf mass and effective temperature distributions, and I will discuss these results in the context of the current models of compact binary evolution.