



The Beginnings and Ends of Double White Dwarfs

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Population synthesis study of the Gaia binary white dwarf population within 100 pc

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Gaia-DR2 has provided an unprecedented wealth of information about the white dwarf population of our Galaxy. In particular, our estimates show that the sample up to 100 pc from the Sun can be considered as practically complete. This fact permits to obtain accurate statistics about the percentages of the different subpopulations, such as the number of resolved/unresolved double degenerate systems, or white dwarf plus main sequence stars. With the aid of a detailed population synthesis code we are able to fit the best models parameters thus obtaining valuable information about the initial separation distribution, the binary fraction or the initial mass and ratio distribution, among others.

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