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White Dwarf - White Dwarf Gravitational Wave background in the LISA range as a tool to constrain binary evolution

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Gravitational Waves have proven to be an excellent tool for understanding populations of binaries. In this work, we investigate the population of White Dwarf binaries in the Milky Way. We calculate the Gravitational Wave background from these sources in the LISA sensitivity range.

We use the COMPAS population synthesis code, and investigate the dependence of the background spectrum on the assumptions on binary analysis. We discuss the possibility of constraints on binary evolution that LISA Gravitational Wave observations may yield.

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