Stellar chronology with white dwarfs in wide binaries

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The evolution of white dwarfs can be understood as a cooling process, which is relatively well known at the moment. For this reason, white dwarfs in wide binaries are a powerful tool to constrain stellar ages, specially above 1 Gyr, since in this range other age determination methods show difficulties. Wide binary members are suposed to have been born simultaneously and with the same chemical composition, and since they are well separated (100-1000 AU aprox.) we can assume that no interaction has occured between them in the past. So, obtaining the age of the white dwarf will mean the determination of the age of the whole system. We have been able to infer the ages of a wide binary sample composed by pairs with a DA white dwarfs and a low-mass companion. We are working in the description of the time evolution of high energy emissions of low-mass stars, so age determination is a crucial factor for our final aim.