

Time delay distributions for the SD and DD scenarios, calculated by Förster, Wolf, Podsiadlowski and Han (2006).

The DD merger results are very similar to Yungelson et al's (2004). Very encouraging, since the binary-population-synthesis codes of the two groups are quite different and were developed independently!

Uncertainties come e.g. from the values of various input parameters such as α_{ce} .

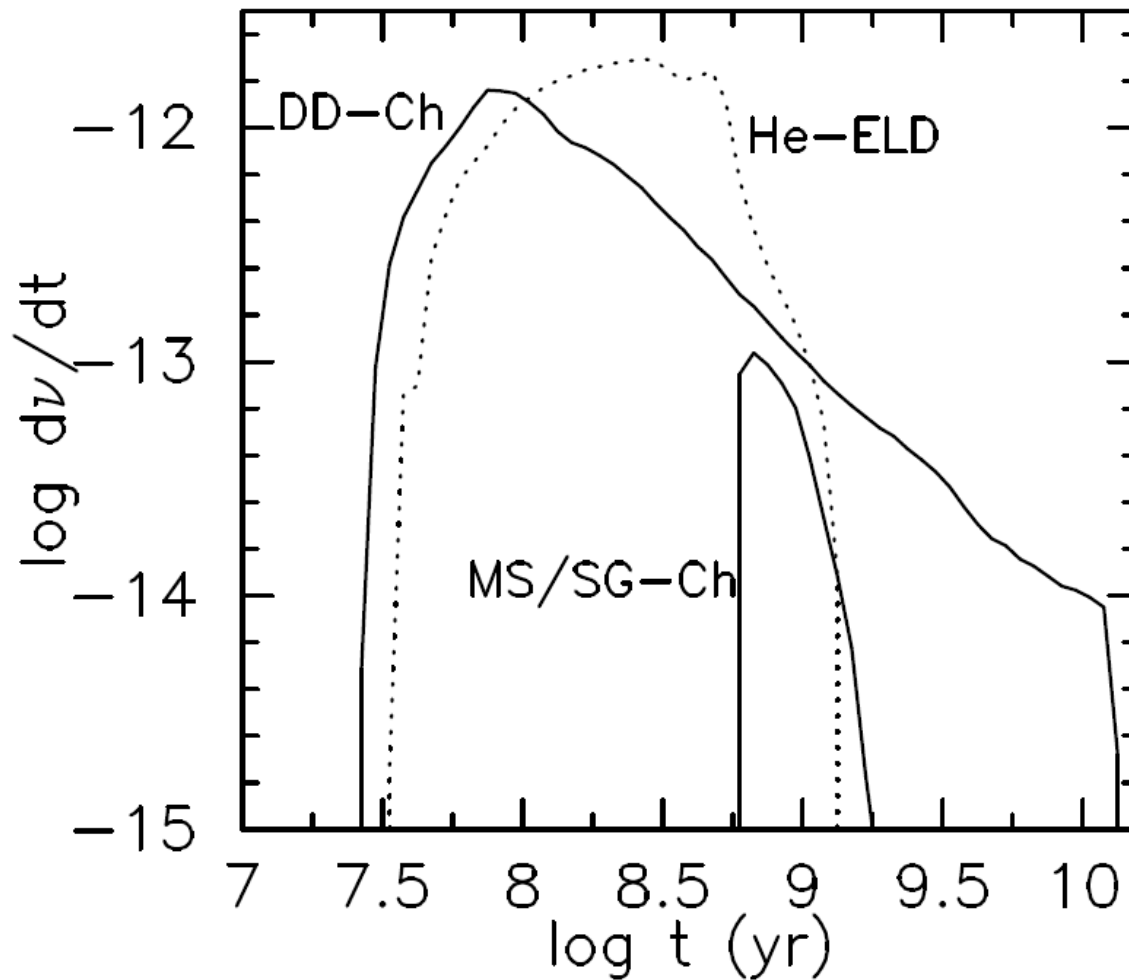


Figure 2: Rates of potential SN Ia-scale events after a 1-yr long star formation burst that produces $1 M_{\odot}$ of close binary stars. *Yungelson 2004*

Förster, Wolf, Podsiadlowski and Han (2006) get an ~ 5 times higher peak of the MS/SG-Ch systems than Yungelson, but *qualitatively* good agreement with these results (with a very different population synthesis program)

For the DD scenario the results of Yungelson et al.(2004) and Foerster et al.(2005) are remarkably similar: For Y. et al. they start at 30 million yrs, for F. et al. at 50 million yrs. Both peak at 100 million yrs, and decrease by factor 100 in 10 billion yrs.

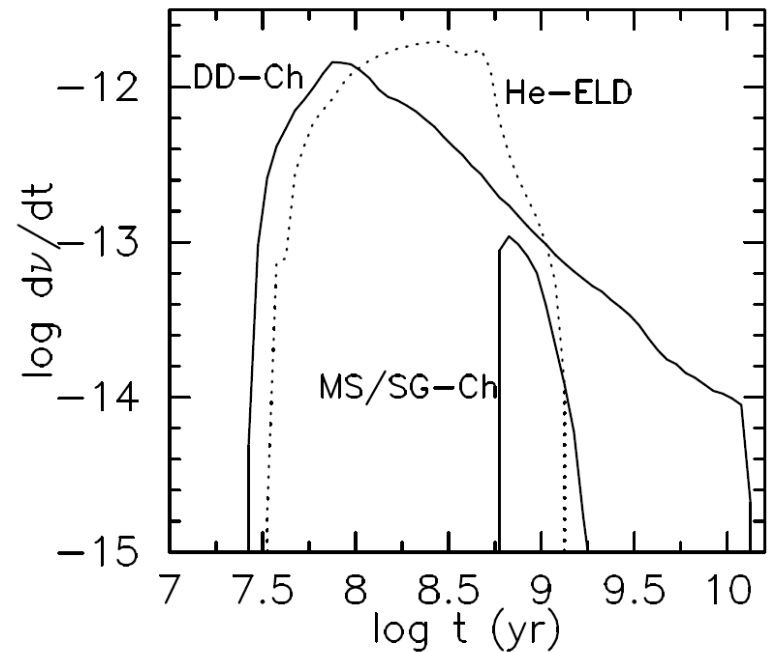


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Yungelson et al.2004

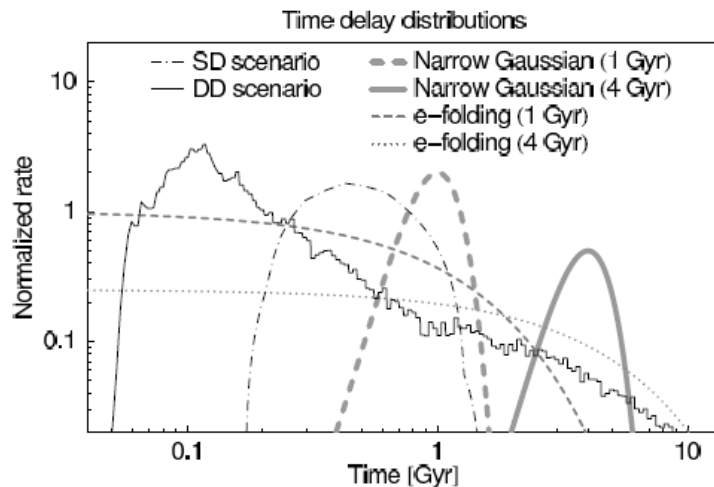


Figure 1. Theoretical time delay distributions (Han & Podsiadlowski 2004) compared to parametrized time delay distributions used in the analysis. The best-fitting model in S04 corresponds to the 'narrow Gaussian' distribution with a mean time delay of 4 Gyr Foerster et.al. '06

For the SD scenario, Y. et al.'s begins and peaks at 600 million yrs, and then ends at about 2 billion yrs. F. et al.'s begins at 200 million yrs., peaks at 400 million yrs. and ends at about 2 billion yrs.

The only big difference: F. et al.'s peak is 5 times higher.