

Abstract Submitted
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High-spin binary black hole mergers¹ PEDRO MARRONETTI, WOLFGANG TICHY, Florida Atlantic University, BERND BRÜGMANN, ULRICH SPERHAKE, University of Jena, JOSÉ GONZÁLEZ, Universidad Michoacana de San Nicolas — We study identical mass black hole binaries with spins perpendicular to the binary’s orbital plane. These binaries have individual spins ranging from $s/m^2 = -0.90$ to 0.90 , ($s_1 = s_2$ in all cases) which is near the limit possible with standard Bowen-York puncture initial data. The extreme cases correspond to the largest initial spin simulations to date. Our results expand the parameter space covered by Rezzolla *et al.* and, when combining both data sets, we obtain estimations for the minimum and maximum values for the intrinsic angular momenta of the remnant of binary black hole mergers of $J/M^2 = 0.341(4)$ and $0.951(4)$ respectively.

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