High-spin binary black hole mergers\textsuperscript{1} PEDRO MARRONETTI, WOLFGANG TICHY, Florida Atlantic University, BERND BRÜGMANN, ULRICH SPERHAKE, University of Jena, JOSÉ GONZÁLEZ, Universidad Michoacana de San Nicolás — 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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