Highly-Spinning-Black-Hole Binaries  YOSEF ZLOCHOWER, CARLOS LOUSTO, MANUELA CAMPANELLI, Rochester Institute of Technology —
In this talk I will show recent results obtained by the RIT group from simulations of highly-spinning-black-hole binaries using the moving puncture approach; paying particular attention to the phenomena of superkicks, orbital hangup, and cosmic censorship. Simulations of highly spinning binaries are challenging both due to the amount of spurious radiation introduced by the initial data choice, which introduces unwanted eccentricity, and the smallness of the horizons. Accurate results can be obtained with long evolutions and very fine central resolutions.

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