Contribution ID: **39** Type: **not specified**

Comparing effective-one-body and gravitational self-force results for black hole binaries with a spinning secondary

Wednesday, 5 July 2023 09:20 (20 minutes)

Building on previous work comparing effective-one-body (EOB) and gravitational self-force (GSF) waveforms for nonspinning black hole binaries on quasi-circular equatorial orbits, I will present an extension of this comparison to binaries with a spinning secondary. In particular, the comparison involves binaries with mass ratios ranging from 1:15 to 1:50000, and dimensionless spin on the secondary ranging from 0.1 to 0.95 (both positive and negative). As done before, the agreement between the EOB waveforms and the GSF ones is probed both by alignment in the time domain and by means of a gauge-invariant function of the waveform frequency. The outcome of this comparison also suggests some changes in the EOB spin-orbit sector.

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Session Classification: Wednesday Morning