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Black hole-neutron star binary initial data and its evolution with the moving puncture method¹ ALIREZA RASHTI, WOLFGANG TICHY, Florida Atlantic University — We have developed a new code, called Elliptica, to construct initial data for various compact objects. Here we construct initial data for a black hole-neutron star system where the black hole interior is excised. Our aim is to evolve these initial data with a code like BAM that uses the moving puncture method. We thus have to fill the interior of the black hole with valid data before we can start the evolution. Here, we present first results from our effort to evolve these data, such as trajectories, constraint violations, and gravitational waves.

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