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Binary Black Hole Neutron Star Initial Data

ALIREZA RASHTI, WOLFGANG TICHY, Florida Atlantic University — We have made a new infrastructure, named Elliptica, to construct initial data for various compact objects. Elliptica is an open-source code uses multi-domain spectral method with Schur complement domain decomposition and direct solver to solve elliptic equations with arbitrary boundary conditions. Here, we present our first results about the construction of initial data for black hole-neutron star binaries with arbitrary spin.

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