

Abstract Submitted
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Binary neutron star initial data with spin¹ WOLFGANG TICHY,
Florida Atlantic University — Astrophysical neutron stars are expected to be spinning. Due to the existence of millisecond pulsars we know that these spins can be substantial. As in the case of binary black holes, spins could have a large impact on the merger dynamics. Thus it is important to develop a method to set up binary neutron star initial data, where both stars can have arbitrary spins. We discuss what approximations one can make to construct binary neutron star initial data with spin. We also compare with the well known cases of corotating and irrotational neutron star binaries.

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