Numerical Simulations of Boson Stars

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Abstract

In the zoo of exotic compact objects, stars comprised of compact configurations of bosonic fields are considered to be one of the most favoured candidates whose merger may be detected in the future with the rapid advancements in gravitational wave astronomy. In this talk, I will present some results from a recent numerical study of the merger of boson stars including an exploration of the dynamics and gravitational wave signals produced in such mergers.