

Abstract Submitted
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Search for Intermediate-Mass Black Hole Binary Mergers During Advanced LIGO/Virgo's Third Observing Run BRENDAN O'BRIEN, University of Florida, LIGO-VIRGO-KAGRA COLLABORATION — The Advanced LIGO and Advanced Virgo detectors can observe gravitational-wave emission from binary mergers containing an intermediate-mass black hole (IMBH) further than any other known source. The detection of such sources could transform our understanding of stellar evolution and could shed light to the formation of supermassive black holes. In this talk, we will discuss challenges of IMBH binary detection, possible astrophysical implications, and describe searches for IMBH binary systems during LIGO/Virgo's current third observing run.

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