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**Proposed searches for sub-solar mass ultracompact objects with Advanced LIGO** PHOEBE MCCLINCY, Pennsylvania State University, LIGO-VIRGO-KAGRA COLLABORATION — The recent observations of stellar mass black hole binaries by Advanced LIGO and Advanced Virgo have revived interest in the possibility of sub-solar mass ultracompact objects. Due to the lack of knowledge surrounding the composition of sub-solar mass ultracompact objects, they have long been of interest as a potential dark matter candidate. Since astrophysical processes are not expected to produce ultracompact objects below one solar mass, the detection of such an object could therefore be an indication of new physics. We present proposed future searches and the parameters of interest for sub-solar mass ultracompact objects with LIGO, Virgo, and KAGRA.

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