## Abstract Submitted for the APR17 Meeting of The American Physical Society

The PyCBC search for binary black hole coalescences in Advanced LIGO's first observing run<sup>1</sup> JOSHUA WILLIS, Abilene Christian Univ, LIGO SCIENTIFIC COLLABORATION — Advanced LIGO's first observing run saw the first detections of binary black hole coalescences. We describe the PyCBC matched filter analysis, and the results of that search for binary systems with total mass up to 100 solar masses. This is a matched filter search for general-relativistic signals from binary black hole systems. Two signals, GW150914 and GW151226, were identified with very high significance, and a third possible signal, LVT151012, was found, though at much lower significance.

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