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The PyCBC search pipeline for detecting gravitational waves from compact binary mergers ALEXANDER NITZ, Max Planck Inst for Gravitational Physics , LIGO SCIENTIFIC COLLABORATION — We present the matched-filtering based PyCBC offline pipeline used to analyze the first Advanced LIGO observing run. The search has been developed to find gravitational waves from the mergers of black holes and neutron stars with a total mass between 2 and 100 solar masses using a bank of templates. We describe the techniques used to extract signals, suppress non-Gaussian noise transients, and estimate the background of false alarms.

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