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**Searching for the stochastic gravitational-wave background in Advanced LIGO's first observing run<sup>1</sup>**

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One of the most exciting prospects of gravitational-wave astrophysics and cosmology is the measurement of the stochastic gravitational-wave background. In this talk, we discuss the most recent searches for a stochastic background with Advanced LIGO the first performed with advanced interferometric detectors. We search for an isotropic as well as an anisotropic background, and perform a directed search for persistent gravitational waves in three promising directions. Additionally, with the accumulation of more Advanced LIGO data and the anticipated addition of Advanced Virgo to the network in 2017, we can also start to consider what the recent gravitational-wave detections GW150914 and GW151226 tell us about when we can expect a detection of the stochastic background from binary black hole coalescences.

<sup>1</sup>For the LIGO Scientific Collaboration and the Virgo Collaboration