

Abstract Submitted
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Detecting alternative polarization states of stochastic gravitational waves with pulsar timing arrays LOGAN O'BEIRNE, NEIL CORNISH, NICOLAS YUNES, Montana State Univ — We have developed simulated gravitational wave backgrounds from a population of supermassive black holes with the full range of polarization states possible in alternative theories of gravity. We apply Bayesian inference to explore how well the full polarization content can be inferred from the simulated data, and use analytic calculations of the variance in the correlation functions for each polarization state to understand the results.

Logan O'Beirne
Montana State Univ

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