

Abstract Submitted
for the APR20 Meeting of
The American Physical Society

Detecting Memory Effects in the Era of Gravitational-Wave Detectors ATUL DIVAKARLA, BERNARD WHITING, University of Florida, ERIC THRANE, Monash University, GUIDO MUELLER, University of Florida, PAUL LASKY, Monash University — Gravitational-wave memory effects are direct tests of general relativity and have been of recent interest as they are closely related to soft gravitons and the black hole information paradox. We give an update on a search for memory signals, from the first and second observing runs of LIGO. We also discuss the detectability of the displacement and velocity memory effects for the future LISA mission. We discuss different effects that pose as interesting analysis problems for LISA and how they may impact attempts at testing general relativity.

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Date submitted: 11 Mar 2020

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