Abstract Submitted
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Testing gravity with standard sirens[1] JOSE MARIA EZQUIAGA, University of Chicago — Multi-messenger gravitational wave (GW) astronomy offers exciting new avenues to test Einstein's theory of gravity. In this talk I will summarize what we could learn about gravity using standard sirens. In particular, I will focus on tests of the propagation speed, the GW luminosity distance and additional polarizations. Moreover, I will present recent results on how to probe additional cosmological fields with GW oscillations. FinalIy, I will discuss the prospects of observing these effects with present and future GW observatories such as LIGO/VIRGO and LISA.

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