

Abstract Submitted
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Observing neutron stars with Cosmic Explorer and Einstein Telescope¹ JOCELYN READ, PHILIPPE LANDRY, California State University, Fullerton — As ground-based gravitational-wave astronomy improves in sensitivity over the coming decades, a universe of neutron-star mergers will come into view. I will outline the expected sensitivity to the population of neutron-star binaries for observatories like Cosmic Explorer and Einstein Telescope, which aim to record such mergers from redshifts of order 2 or beyond. For nearby mergers, precision measurements of orbital dynamics will be possible, and I will describe the capabilities of future observatories to determine neutron-star tidal interactions and the properties of dense matter.

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