Abstract Submitted
for the APR21 Meeting of
The American Physical Society

Measuring tidal deformability and radii of neutron star sources with third generation gravitational wave detector networks RACHAEL HUXFORD, SSOHRAB BORHANIAN, BANGALORE SATHYAPRAKASH, Pennsylvania State University, LIGO COLLABORATION — Third generation gravitational wave detectors such as the Einstein Telescope and Cosmic Explorer could be the newest members of an ever-expanding network of current and planned ground-based detectors across the globe. With each detector addition, a more sensitive network is created with improved capabilities. In this presentation, we explore how well current and proposed detector network configurations constrain the tidal deformability and radii of neutron star sources and how third generation of detectors will improve these.

Rachael Huxford
Pennsylvania State University

Date submitted: 08 Jan 2021 Electronic form version 1.4