

Abstract Submitted
for the APR16 Meeting of
The American Physical Society

Comparison of localizations of sources from gravitational-wave data alone REED ESSICK, Massachusetts Inst of Tech-MIT, LIGO SCIENTIFIC COLLABORATION COLLABORATION — Various gravitational-wave searches make different assumptions about the expected signals and sources. These assumptions can produce different posterior distributions for the location of possible sources. Understanding localizations from gravitational-wave data alone is crucial when interpreting the different posteriors and planning possible follow-up observations, particularly for new data recorded by the Advanced LIGO detectors. I describe a few sets of reasonable assumptions and how they affect localization, focusing on a comparison of posteriors produced by different localization algorithms using both simulated and actual data from the Advanced LIGO detectors.

Reed Essick
Massachusetts Inst of Tech-MIT

Date submitted: 06 Jan 2016

Electronic form version 1.4