

Abstract Submitted
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Phase Separation and Peak Time Delays of Gravitational Wave Polarizations¹ ERIK LENTZ, MICHELE ZANOLIN, QUENTIN BAILEY, Embry-Riddle University, E.R.G.W.A.G. TEAM — Triangulation of a randomly polarized Gravitational wave transients that uses time discrepancies of the interferometer sites can be affected by the two polarizations. In particular, phase differences, or time delays, of the two polarizations can be confused with the time delay related to the angle of arrival and induce an error in the direction reconstruction if one instrument detects mostly one polarization and another detects mostly the other polarization. Various sources are discussed and a frequency dependent upper limit on the triangulation error is introduced.

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