

Abstract Submitted
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Early warning detection of gravitational waves from binary neutron stars RYAN MAGEE, Pennsylvania State University — The coincident detection of GW170817 and GRB170817A was a shining start to the era of multi-messenger astronomy informed by gravitational waves. Despite the successes surrounding GW170817, it is intriguing to wonder what remains to be discovered in the ~ 11 hours between gamma ray observations and those at other wavelengths. Prompt observations at other bands will further inform our understanding of r-process nucleosynthesis, shock-heated ejecta, and the nature of the remnant immediately following merger. We aim to facilitate follow up of electromagnetically bright candidates by providing coalescence time estimates and sky maps up to one minute before merger. We present efforts to realize early warning detections in Advanced LIGO's third observing run.

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