

Toward Early-Warning Detection of Gravitational Waves from Compact Binary Coalescence

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Rapid detection of compact binary coalescence (CBC) with a network of advanced gravitational-wave detectors will offer a unique opportunity for multi-messenger astronomy. Prompt detection alerts for the astronomical community might make it possible to observe the onset of electromagnetic emission from (CBC). We demonstrate a computationally practical filtering strategy that could produce early-warning triggers before gravitational radiation from the final merger has arrived at the detectors.

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