

Abstract Submitted
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Identifying Electromagnetic Counterparts to Gravitational Wave Triggers With DECam.¹ PHILIP COWPERTHWAIT, Harvard Univ — Identifying the electromagnetic counterpart to a gravitational wave (GW) event is one of the great observational challenges in modern astronomy. We report on our work to overcome this challenge by investigating the theoretical and practical issues associated with optical follow-up of a GW event. This includes a systematic study of the potential contaminant population and their impact on counterpart detectability in simulated observations. Additionally, we utilize data taken with the Dark Energy Camera (DECam) on the Blanco 4-m telescope at CTIO. These data serve as a mock follow-up to a GW event and assist in the characterization of contamination not captured in simulations.

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