

Abstract Submitted
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Estimating the Rate of False Signals in LIGO's Compact Binary Coalescence Gravitational-wave Searches¹ SARAH CAUDILL, Louisiana State University, LIGO COLLABORATION, VIRGO COLLABORATION — The method of time-shifted data has traditionally been the technique used to estimate the rate of false signals in LIGO's non-stationary, non-Gaussian instrumental noise. However, this method fails to provide a rate for any gravitational-wave candidates with a higher ranking-statistic than the highest-ranked false signal in any of the time-shifted data. I will discuss new methods of estimating the rate of false signals via single detector instrumental noise and new techniques involving time-shifted data. I will demonstrate how each of these new methods will improve our ability to attach false signal rates to our gravitational-wave candidates.

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