

Abstract Submitted
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Final Results of the All-sky Search for Gravitational-wave Bursts in the First Joint LIGO-GEO-Virgo Run AMBER STUVER¹, LIGO Livingston Observatory, LIGO SCIENTIFIC COLLABORATION, VIRGO COLLABORATION — The LIGO-GEO-Virgo network of gravitational-wave detectors collected data of unprecedented sensitivity in their 2005-2007 science runs and have produced the most sensitive all-sky burst search to date. Using data from these runs, we describe the search for bursts: short-duration gravitational-wave signals with unknown or poorly modeled waveforms. Such signals may accompany astrophysical events like core-collapse supernovae, and the merger phase of coalescing binary compact stars. 387 days of data were collected when at least 2 of the 4 LIGO/Virgo detectors were in operation and four different analysis algorithms were applied to these data in the frequency band of 50 - 6000 Hz. In this talk, we will discuss the search algorithms used, their combined results and their astrophysical interpretation.

¹on behalf of of the LIGO Scientific Collaboration and Virgo Collaboration

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