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All-sky Search for Gravitational-wave Bursts in the Second Joint LIGO-Virgo Run AMBER STUVER, LIGO Livingston Observatory, LIGO SCIENTIFIC COLLABORATION, VIRGO COLLABORATION — The LIGO-Virgo network of gravitational-wave detectors collected data with improved sensitivity in their 2009-2010 science run and, when combined with the previous joint science run in 2005-2007, 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 or the merger phase of coalescing binary compact stars. 207 days of data were collected in 2009-2010 when at least 2 of the 3 LIGO/Virgo detectors were in operation and the data were analyzed in the frequency band of 64-5000 Hz. In this talk, we will discuss the search algorithm used, results, and the astrophysical interpretation when combined with the previous joint search (2005-2007) resulting in 594 days of observation.

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