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**An all-sky search for unmodeled long-duration transient gravitational-wave signals** TANNER PRESTEGARD, Univ of Minn - Minneapolis, LIGO SCIENTIFIC COLLABORATION, VIRGO COLLABORATION — A number of astrophysical models predict transient emission of gravitational waves (GWs) on relatively long time-scales, lasting from seconds to days. These GWs are often not accompanied by a detectable electromagnetic counterpart, e.g., a gamma-ray burst. In order to search for gravitational waves produced by these mechanisms, we are developing an un-triggered all-sky extension of an excess cross-power search pipeline that has recently been used to study long-lived signals associated with gamma-ray bursts. Here, we give an overview of this all-sky search pipeline, focusing on GW sources of interest, data analysis methods, and the expected sensitivity of such a search using LIGO data.

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