

Abstract Submitted  
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**Incoherent wide parameter-space searches for gravitational waves from neutron stars using LIGO S2 and S3 data** GREGORY MENDELL, MICHAEL LANDRY, LIGO Hanford Observatory, THE LIGO SCIENTIFIC COLLABORATION — The LIGO Scientific Collaboration has developed several incoherent methods for wide parameter-space searches for continuous gravitational-wave signals from neutron stars. We present an overview of two of these methods: Stack-slide and the Hough transform. These methods are less sensitive than fully-coherent matched filtering but are much more computationally efficient, allowing a larger parameter space to be searched with available computing resources. Application of these methods to LIGO data taken during the second and third science runs (S2 and S3), as well as plans to incorporate these methods into future hierarchical searches, will also be presented.

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