

Abstract Submitted  
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**Results from all-sky searches for continuous waves** VLADIMIR DERGACHEV, AEI Hannover — Continuous waves from non-axisymmetric neutron stars are orders of magnitude weaker than transient events from black hole and neutron star collisions. As continuous waves from galactic sources are expected to persist across an observing run the searches are carried out by integrating months of collected data. This greatly increases sensitivity, with a corresponding increase in analysis complexity. Loosely coherent searches are designed to cover large parameter spaces, trading off potential sensitivity of a single-target search for greater chance of detection. We will present results of all-sky search for neutron stars and other sources carried out by Falcon pipeline utilizing loosely coherent algorithms.

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