

Abstract Submitted  
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**Distributional Tests for Gravitational Waves from Core-Collapse Supernovae** MAREK SZCZEPANCZYK, Embry-Riddle Aeronautical University, LIGO COLLABORATION — Core-Collapse Supernovae (CCSN) are spectacular and violent deaths of massive stars. CCSN are some of the most interesting candidates for producing gravitational-waves (GW) transients. Current published results focus on methodologies to detect single GW unmodelled transients. The advantages of these tests are that they do not require a background for which we have an analytical model. Examples of non-parametric tests that will be compared are Kolmogorov-Smirnov, Mann-Whitney, chi squared, and asymmetric chi squared. I will present methodological results using publicly released LIGO-S6 data recolored to the design sensitivity of Advanced LIGO and that will be time lagged between interferometers sites so that the resulting coincident events are not GW.

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