

Abstract Submitted
for the APR20 Meeting of
The American Physical Society

GlitchBuster: If there's something strange in your strain data, who you gonna call?¹ NEIL CORNISH, Montana State University, Bozeman — The LIGO/Virgo data are polluted by frequent noise transients, or glitches, which can mimic gravitational wave signals, and bias parameter estimates for real signals. Signals that in-band for tens of seconds or more, such as those from binary neutron stars, have a high probability of competing with one or more glitches. Here I present a wavelet denoising algorithm that can clean the data of glitches in real time, while preserving any gravitational wave signals.

¹Supported by NSF grant PHY-1912053

Neil Cornish
Montana State University, Bozeman

Date submitted: 07 Jan 2020

Electronic form version 1.4