



Contribution ID: 27

Type: **Contributed Talk (20 minutes)**

## A comparison of GstLAL performance in gaussian data and LIGO detectors data.

*Monday 6 June 2022 15:15 (20 minutes)*

In this study we explore the differences of results of GW searches with the GstLAL pipeline applied to real LIGO data and simulated Colored-Gaussian data.

This difference is quantified with a measure derived from the Kolmogorov–Smirnov test, and is used to find out significant differences depending on template bank parameters.

We find that regions representative of high chirp mass are roughly 6 times more well behaved than those of low chirp mass according to the chosen measure.

### Which topic best fits your talk?

Modelling and Machine Learning Algorithms

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