Jade Powell 7/21/2025

Gravitational Wave Detection

Add your response to the discussion question above.

7 0

An astronomer trying to detect a supernova according to AI

YY 7/22/25 3:06PM

How to improve the current detection? Any more analysis we can do?

0 0

INVISIBLE CARIBOU 7/22/25 3:06PM

What is the SNR needed for a SN detection?

0 0

FLYING CACTUS 7/22/25 3:06PM

Detecting GW polarizations from CCSN

0 0

QUIRKY DUCK 7/22/25 3:07PM

What we can learn from Betelgeuse?

0 0

LOYAL OTTER 7/22/25 3:08PM

Being realistic, what are the concrete directions on the theory and detection sides to prepare the ground for a CCSN GW signal?

♡ 0 ◯ 0

AGILE ALBATROSS 7/22/25 3:08PM

In Andresen's presentation slide 17, what is the low energy "line" in the spectrograms?

♡ 0 ◯ 0

ADORABLE TROUT 7/22/25 3:09PM

What is the minimum temporal seperation between prompt convection and beginning of high frequency feature

♡ 1 ◯ 0

VALIANT TIGER 7/22/25 3:09PM

Is it possible to combine the single detector search results with the coincident searches?

♡ 0 ◯ 0

VALIANT TIGER 7/22/25 3:10PM

What kind of information from the detection side might be helpful for the SN simulations?

♡ 0 ◯ 0

OLIVIA K 7/22/25 3:10PM

Since we are most confident about detecting CCSN <10 Kpc away, do we have a red flag list for the stars to watch the hardest in case they go supernova? How far out have we confidently catalogued most likely CCSN progenitor candidates?

♡ 0 ◯ 2

> **Fearless Reindeer** 7/22/25 3:30PM
> https://en.wikipedia.org/wiki/List_of_supernova_candidates

> **Dependable Puma** 7/22/25 3:31PM
> https://www.astronomy.ohio-state.edu/asassn/index_old.shtml

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ADORABLE TROUT 7/22/25 3:10PM

What is the minimum temporal seperation between the beginning of the high frequency feature and the beginning of SASI, if any

♡ 0 ◯ 0

NERVOUS EEL 7/22/25 3:11PM

If a core-collapse supernova like SN 1987A occurred today at the same distance in the Large Magellanic Cloud, would current gravitational wave detectors such as LIGO, Virgo, or KAGRA be sensitive enough to detect the gravitational wave signal?

♡ 0 ◯ 0

GENTLE QUOKKA 7/22/25 3:11PM

What new data analysis tests or upper limits (if any) would you like to see in the next LVK paper that you haven't seen in past papers?

♡ 0 ◯ 0

KENGO SHINODA 7/22/25 3:11PM

What we need for the detection of failed supernova GW?

And were we able to detect M31-2014-BH1 if Ligo was available on 2014?

♡ 0 ◯ 0

QUIRKY BEAR 7/22/25 3:12PM

What is the maximum distance upto which a GW signal from SN could be detected with current generation or next generation detectors?

♡ 0 ◯ 0

RESPECTFUL JACKRABBIT 7/22/25 3:15PM

Is it really useful to search for SNCC in GW data when this can be detected in neutrino data in essentially zero background?

♡ 0 ◯ 0

OLIVIA K 7/22/25 3:24PM

Are there multi messenger methods proposed to calculate PNS parameters (mass, rotation, etc) if GW signals are influenced by many parameters?

♡ 0 ◯ 0

PEACEFUL PUMA 7/22/25 3:35PM

What will happen after 05? When will we have detectors that are always on?

♡ 0 ◯ 0

ATTENTIVE CATERPILLAR 7/22/25 3:38PM

What knowledge can be pulled from understanding supernovae that can impact the general public?

♡ 0 ◯ 0

UNIQUE RACCOON 7/22/25 3:42PM

Can the detection of gws from CCSNe give insights of gravity in the strong regime? Can we test alternative theories to GR from SNs signals? Is this of interest for the group?

♡ 0 ◯ 0