

cavagliam

## Multimessy discussion

I felt some heat. Was it a burst of GWs, neutrinos, or photons?



How do we find disappearing massive stars to do a targeted search for their gravitational wave emission?

Ask your multi-messenger pal!

em2gw

How reliable are the CCSN GW signals to get physical parameters of the source? Are we in the correct direction putting in correlation the CcSN GW features with the PNS parameters?

Ask your multi-messenger pal!

nu2gw

A neutrino, a photon, and a gravitational wave walk into a detector...

Ask your multi-messenger pal!



Padlet 📦 Bold Gecko

What is the most useful way to define the GW signal time when we send a detection alert out to astronomers?

Ask your multi-messenger pal!

Padlet Sunique Tiger

Can we do better in estimating the OSW from the lightcurve analysis?

Ask your multi-messenger pal!

Padlet Special Defiant Butterfly

Can we set up a dataset of GWs including neutrino data/triggers to test multi-messenger approaches beyond triggered search?

Ask your multi-messenger pal!



The GW data for SN2023ixf will be public in August? Can we do more analysis as a team to see if we missed something?

Ask your multi-messenger pal!



What kinds of progenitor constraints can EM observations place?

Ask your multi-messenger pal!

I know it has been covered over the week but can someone please summarize what timings can neutrinos and EM provide together OR individually? (e.g. when is shock breakout, when is core collapse)

Ask your multi-messenger pal!

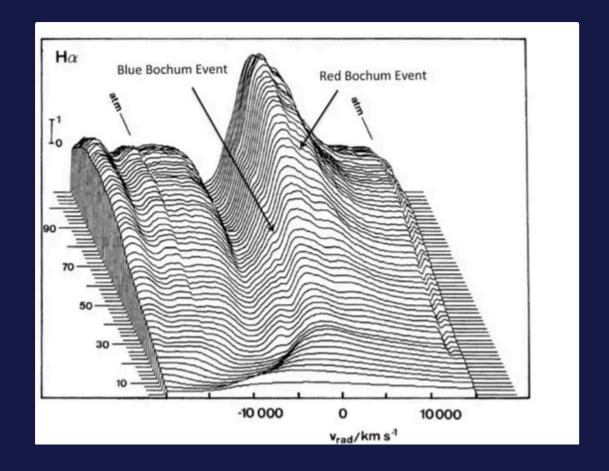


Question for Thomas Janka. Can you summarize what is your opinion on the relationship between the sasi frequency in the neutrino signal and in the gw channel and how it changes with respect to the outgoing direction with respect to the axis of the SASI

Ask your multi-messenger pal!

Has there been a systematic search for Bochum-like events in CCSNe spectra?

Ask your multi-messenger pal!





What parameters of the PNS that you could usually extract from the HFF could neutrino signals help constrain to remove degeneracies?

Ask your multi-messenger pal!



What distinguishes the light curve of a GRB from a regular CCSN? Is there a quiescent phase of X-rays at the tail end of the GRB due to the new black hole accreting the rest of the star? Is there an EM light curve at all?

Ask your multi-messenger pal!

If the gravitational wave (GW) emission from a core-collapse supernova (CCSN) is asymmetric, is it possible that we might detect only neutrinos and electromagnetic (EM) signals, but no gravitational waves, even if the event occurs within our galaxy? In such a scenario, would we still be able to constrain any physics or gain meaningful insights?

Ask your multi-messenger pal!



What is the time delay between the core bounce and the neutrino burst?

Ask your multi-messenger pal!

What is the time delay between the bounce and the neutrino burst?

Ask your multi-messenger pal!

Padlet Subbly Centipede

What can the detection of GWs from CCSNe (successful or failed) tell us about gravity beyond GR?

Ask your multi-messenger pal!

Padlet Sobservant Fly

Is there interest in the SN group to include detectability analysis of GWs from collapsars, i.e., accretion disks and GRBs+cocoons?

Ask your multi-messenger pal!

How fast can a neutrino/GW burst trigger EM follow-ups? Is the response time fast enough to catch the shock breakout in the stripped envelope case (~30 minutes)?

Ask your multi-messenger pal!

nu2em

Padlet Supportive Quail

Regarding biased codes. Will we ever see a proper code comparison to understand the vastly different results in the literature?

Ask your multi-messenger pal!

nu2gw