

Report on Detection Committee

Peter Saulson

A standing committee to advise the LSC and the Spokesperson on issues relating to making a claim that we have detected gravitational waves.

And also, perhaps, of other statistical issues.

Appointed in consultation with Analysis Coordinator and the Search Groups.

Stuart Anderson, Jolien Creighton, Sam Finn, Albert Lazzarini, Greg Mendell, Peter Shawhan, Rai Weiss, John Whelan, Stan Whitcomb, Alan Wiseman, PRS (chair)

Each of the four Search Groups has now produced a draft Detection Checklist, reflecting the needs of its particular character of signal.

Haven't yet melded into a single document.

Also, a draft document on the procedure for the collaboration to follow if a Search Group has a strong position that a detection may have occurred.

Burst and inspiral share a number of checks about the data *at the time of the event* that aren't appropriate for CW or stochastic.

Inspiral also has signal character check, in common with CW.

Stochastic looks at temporal stationarity, frequency distribution, and pair-by-pair consistency.

We've started exercising the checklists

Inspiral, burst, and stochastic have all had to examine candidates that were formally significant (at least marginally.)

So we're getting practice on the consistency checks.

What's next?

1. Review each group's section
2. Put in common format
3. Share with the collaboration, for comment/revision