

VSR2/4 All-sky Frequency Hough paper

LIGO Document P1500030

Analysis representative: Cristiano Palomba

Other main contributors: Pia Astone, Sabrina D'Antonio, Segio Frasca and students.

The review committee members, Alicia Sintes (chair) , Elena Cuoco and Francesco Salemi, are glad that the paper on the first low-frequency all-sky search for CW is finally ready to be submitted for publication.

- First CW all-sky Upper Limits below 50 Hz
- Improved UL by a factor 2 below 80 Hz

- The reviewers are happy with the methodology adopted to pursue this search and with the actual implementation of the analysis codes.
- The review took overall an exceptionally long time (more than three years between the beginning and the end) to reach completion
- Over the 85 review calls, every step of the analysis has been carefully examined and vetted; a few times the review process has produced improvements, in terms of finding bugs/problems or suggesting different methodologies which resulted in the (re)implementation of parts of the analysis pipeline.
- Methods paper 2014: [10.1103/PhysRevD.90.042002](https://arxiv.org/abs/1407.8333), [arXiv:1407.8333](https://arxiv.org/abs/1407.8333)
- The paper is of high quality and certainly deserves to be submitted for publication:

We thank the EC for consideration of this paper and for comments and questions they may raise.