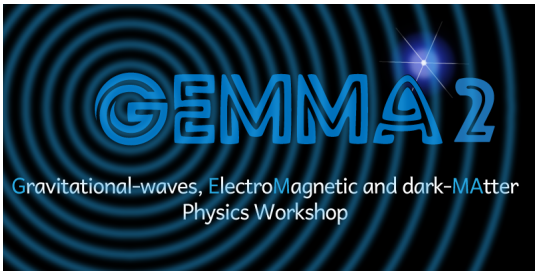

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A doppler modulation based veto chain for CW candidates

In this work we present an algorithm which is currently under development within the framework of the Frequency Hough (FH) pipeline for the search of continuous gravitational (CW) waves. The procedure uses the Earth Doppler effect to find correlations among candidates produced by the FH to discard candidates originated by noise and retain only those produced by genuine CW sources. The scope is to reduce the false alarm probability and the computational cost for the follow up of the most significant candidates. We find that, at the moment, the procedure discards up to 80% of the candidates, as not belonging to a genuine CW source, with respect to the standard procedure.

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