

Data Analysis techniques to perform Continuous-Wave searches

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What is a 'Continuous Wave' Signal?

- CW: 'long lived' signal that doesn't evolve much over observation time T_{obs} ...
- ... where typically: $\text{week} \lesssim T_{\text{obs}} \lesssim \text{years}$.
- Expected source: spinning/oscillating neutron stars.
- Expected amplitude weak, as per Haskell's talk.
- Often divided into three classes ...

Targeted searches

- Look for GWs from known pulsars with known timing solutions, e.g. Crab pulsar.
- Computationally very cheap.



Directed searches



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