Data Analysis techniques to perform Continuous-Wave searches

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Data Analysis for CW searches

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What is a 'Continuous Wave' Signal?

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

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Targeted searches

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





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Directed searches

Southampton

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