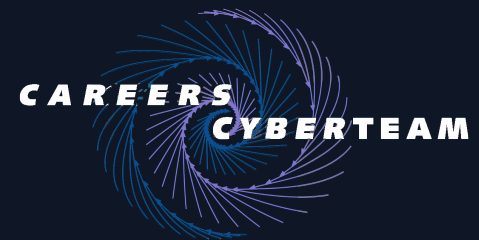


# Expanding computational resources for gravitational wave detection pipelines in medium-latency and beyond

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# Expanding computational resources for gravitational wave detection pipelines in medium-latency and beyond

## Description of project

With the next observing run of LVK (O4) beginning in May 2023, the importance of increased computational resources for GW detections is key to detect a larger population and more sensitive events. By expanding those resources for medium-latency events, we are improving the evaluation of the efficiency of these detections to produce results faster.



# Expanding computational resources for gravitational wave detection pipelines in medium-latency and beyond

## Goals

- Evaluate optimization options and develop strategies.
- Expand computational resources for GW detection.
- Implement some optimizations.
- Perform extensive testing.



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**Timeframe (6 months)**

Start Date: March 1, 2023

End Date: August 31, 2023



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## What I hope to learn

Understand using LVK analysis codes

Develop test cases

Become familiar with HPC

Learn how to implement optimizations



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## Goals for the next month

Project background work

Get HPC access

Begin GitHub project setup

