NSF Campus Cyberinfrastructure PI and
Cybersecurity Innovation for Cyberinfrastructure PI Workshop
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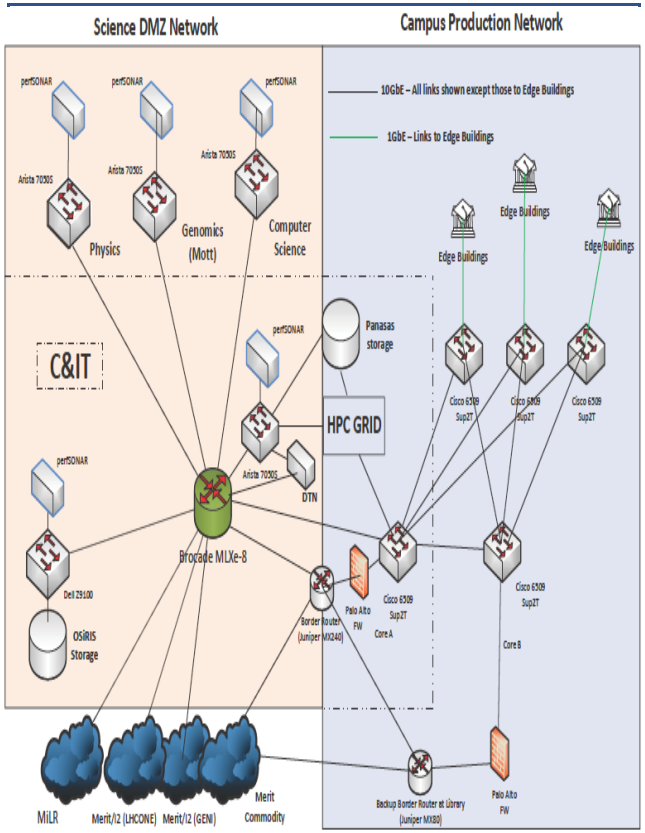
# Quad Chart for: Expanded High Performance Computing at Wayne State

## Challenge Project Seeks to Address:

- insufficient resources to provide the compute power our researchers need
- cluster is aging with slow processors
- few nodes with large memory
- small number of older GPU cards
- usage is often saturated
- 190 TFLOPS, 98k CUDA Cores

## Solution(s) or Deliverables:

- Acquire 6 nodes
- 24 3.2 GHz cores/node
- 64 GB RAM/core (1.5 TB RAM/node)
- 3 NVIDIA Tesla V100 GPU Cards/node
- Mix of cores/RAM/GPU driven by a nuclear physics project needs
- 24 TFLOPS, 92k CUDA Cores




## Scientific Impact or Broader Impact:

- Computational Chemistry
- Membrane Biophysics
- Molecular Dynamics Simulations
- Modeling Complex Materials
- Critical Point in Nuclear Matter
- Probe the Quark Gluon Plasma with Jets

## Metadata tag:

- *https://www.grid.wayne.edu*
- *http://jetscape.org*
- *http://chem.wayne.edu/schlegel/*
- *http://physics.wayne.edu/~cvkelly/*
- *https://s.wayne.edu/huang/*