# Revamp of High Energy Physics Laboratory's Computer Systems

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Milestone 5

GEM Computers

Compute Cluster

Muon Tomography Station

Existing MTS

Development MTS

Milestone 6



# Milestone 5 Progress

Milestone 5 Goals

GEM Computer:

Compute Cluster

Tomography
Station
Existing MTS

Milestone 6 Goals

Task	% Completion	Eric	Josef	Ryan	To Do	
Integrate cluster components.	0%	0%	0%	0%	find new solutions	
Rewire the existing MTS.	90%	70%	20%	0%	miscellaneous touch ups	
Resolve software issues with development MTS.	60%	0%	40%	20%	reinstall AMORE	

#### **GEM Computers**

Milestone 5

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- Building efficient Scripts for GEM team
- Finding solutions to all GEM computers RAID systems

#### Compute Cluster

Milestone 5 Goals

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Milestone 6 Goals

- Ideally:
  - Node boots into ROCKS Kernel CD
  - Node notifies head node of its existence
  - Node requests kickstart file from head node

- In Reality:
  - Node boots into ROCKS Kernel CD
  - Node notifies head node as soon as networking is enabled within the installer
  - In what state does the node request a kickstart file?

# **Existing MTS**

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Development MT

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- Cable lengths have been optimized
- Cables have been tidied up
- Still waiting on FEC firmware

### Development MTS

- Milestone 5
- GEM Computer
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  Station
  Existing MTS
  Development MTS
- Milestone 6 Goals

- Attempted to build AMORE from source
- Makefile 'Makefile.arch' was not found during build configuration, but we did
  find the file in another directory, and made AMORE reliant on that Makefile
  instead.
- Build got further, but a few header files weren't found. The configuration seems to not know the proper location to find some files.
- Continued attempting to get the previous build of AMORE working, by manually changing dependencies to our new version of root.

#### Milestone 5 Goals

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Milestone 6 Goals

Task		Josef	Ryan
Continue to Care for Existing MTS		20%	20%
Compile Instructions for MTS Operation		40%	40%
Prepare Development MTS Machine		50%	30%
Integrate Nodes into Cluster		10%	80%
Assist Researchers		10%	20%

# Questions

Milestone !

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