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## Development of the Tier-1 Facility at Fermilab

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CMS is preparing seven remote Tier-1 computing facilities to archive and serve experiment data. These centers represent the bulk of CMS's data serving capacity, a significant resource for reprocessing data, all of the simulation archiving capacity, and operational support for Tier-2 centers and analysis facilities. In this paper we present the progress on deploying the largest remote Tier-1 facility for CMS, located at Fermilab. We will present the development, procurement and operations experiences during the final year of preparation. We will discuss the results of scale tests and system design. We will outline the hardware selection and procurement and plans for the future to meet the needs of the experiment and the constraints of the physical facility. We will also discuss the successes and challenges associated with enabling a mass storage system to meet the various experimental needs at a significant increase in scale over what is currently achievable. Finally we will discuss the model to support US Tier-2 centers from the Tier-1 facility.

### Submitted on behalf of Collaboration (ex, BaBar, ATLAS)

CMS

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