

# Development of the Tier-1 Facility at Fermilab

*Wednesday 15 February 2006 15:00 (20 minutes)*

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 two years of preparation. We will discuss the development and deployment to support grid interfaces for the Worldwide LHC Computing Grid and the Open Science Grid on the same physical resources. 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.

**Primary authors:** FAGAN, David (FERMILAB); STIEHR, Gary (FERMILAB); Dr WENZEL, Hans (FERMILAB); Dr FISK, Ian (FERMILAB); Dr BAKKEN, Jon (FERMILAB); KAISER, Joseph (FERMILAB); GIACCHETTI, Lisa (FERMILAB); Dr BAUERDICK, Lothar (FERMILAB); MESSER, Tim (FERMILAB); WU, Yujun (FERMILAB)

**Presenter:** Dr FISK, Ian (FERMILAB)

**Session Classification:** Computing Facilities and Networking

**Track Classification:** Computing Facilities and Networking