

DATA STORAGE MANAGEMENT

Combined, the experiments at SLAC and Fermilab have over a petabyte of physics data. This data must be readily accessible to thousands of physicists for analysis both locally and over Global Grids. Storage systems must manage data placement and retrieval to the limits of practicality and affordability, in many cases these systems use and support leading edge technologies.

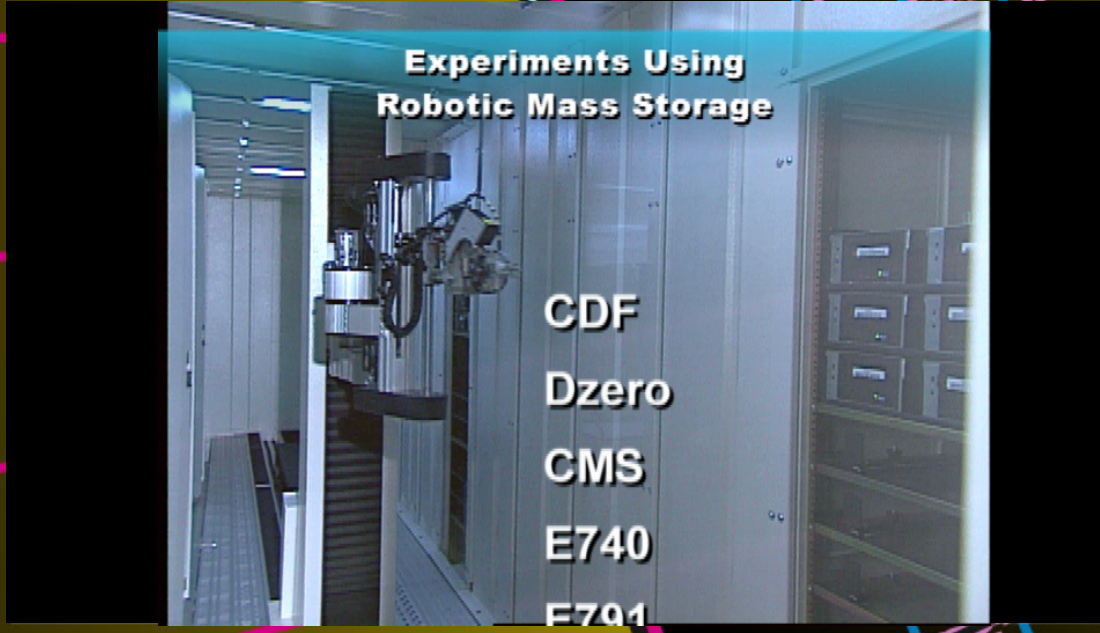
Because High Energy Physics is a statistical science, refining measurements requires that Fermilab and SLAC will collect an increasing amount of physics events in the future.

Integrated FILES/BYTES plots
The U.S. High Energy Physics Laboratories generated millions of files and nearly a petabyte (1,125,898,240,000,000 bytes) of data in the past year.

Cut out for LED display 2.1" x 36"



Enormous data volumes delivered world wide require ambitious technical innovations, such as the largest databases in the world and the leading edge application of Grid technologies.



Production Technology

The amount of software in data storage and movement infrastructure at Fermilab and SLAC approaches a million lines of code. Increasingly, data movement infrastructures must accommodate collaborations distributed worldwide.

Data are fed to very large systems