

Exascale, Sustainable Long-Term Data Preservation

This talk explains how we plan to preserve the data from the key High Energy Physics institutes from around the world, how we will address key requirements from the Funding Agencies as well as the Scientific needs of the community. It also addresses costs and sustainability, metrics and standards.

Hunting the Higgs using the Worldwide LHC Computing Grid (WLCG)

This talk describes the long process of hardening the WLCG through a series of Service Challenges and production readiness tests leading to reliable petascale computing services that allowed data to be turned into discoveries in record time. It covers not only the preparation period for Run1 of the LHC, the data taking period that led to the announcement of the discovery of a Higgs-like particle, but also the preparations for Run2 and beyond - higher data rates, more flexible network architectures and the challenges of tomorrow's processors. It also describes collaborative work performed in the context of the EGI-InSPIRE Heavy User Communities work package in developing and sharing common solutions across multiple communities.