Contribution ID: **277** Type: **Oral**

# The OSG Open Facility: An on-ramp for opportunistic scientific computing

*Monday, October 10, 2016 11:45 AM (15 minutes)*

The Open Science Grid (OSG) is a large, robust computing grid that started primarily as a collection of sites associated with large HEP experiments such as ATLAS, CDF, CMS, and DZero, but has evolved in recent years to a much larger user and resource platform. In addition to meeting the US LHC community's computational needs, the OSG continues to be one of the largest providers of distributed high-throughput computing (DHTC) to researchers from a wide variety of disciplines via the OSG Open Facility. The Open Facility consists of OSG resources that are available opportunistically to users other than resource owners and their collaborators. In the past two years, the Open Facility has doubled its annual throughput to over 200 million wall hours. More than half of these resources are used by over 100 individual researchers from over 60 institutions in fields such as biology, medicine, math, economics, and many others. Over 10% of these individual users utilized in excess of 1 million computational hours each in the past year. The largest source of these cycles is temporary unused capacity at institutions affiliated with US LHC computational sites. An increasing fraction, however, comes from university HPC clusters and large national infrastructure supercomputers offering unused capacity. Such expansions have allowed the OSG to provide ample computational resources to both individual researchers and small groups as well as sizeable international science collaborations such as LIGO, AMS, IceCube, and sPHENIX. Opening up access to the Fermilab FabrIc for Frontier Experiments (FIFE) project has also allowed experiments such as mu2e and NOvA to make substantial use of Open Facility resources, the former with over 40 million wall hours in a year. We present how this expansion was accomplished as well as future plans for keeping the OSG Open Facility at the forefront of enabling scientific research by way of DHTC.

## Tertiary Keyword (Optional)

## Secondary Keyword (Optional)

High performance computing

## Primary Keyword (Mandatory)

Computing facilities

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**Session Classification:** Track 6: Infrastructures

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