# OSG-XD Usage Update

## OSG Council Meeting
### January 29, 2014

*Chander Sehgal*

*cssehgal @fnal.gov*

# OSG Opportunistic Usage 2012 to 2013

| OSG Opportunistic Wall Hours (Millions) | | |
|---|---|---|
| VO | 2012 | 2013 |
| | | |
| engage | 20.0 | 7.8 |
| glow | 17.6 | 16.7 |
| hcc | 5.7 | 4.0 |
| osg | 3.3 | 50.2 |
| sbgrid | 2.2 | 4.2 |
| | | |
| Total | 48.8 | 82.9 |

**Wall Hours by VO (Sum: 48,844,264 Hours)**
53 Weeks from Week 01 of 2012 to Week 00 of 2013

engage
19,985,134
17,635,830
glow
5,671,517
hcc
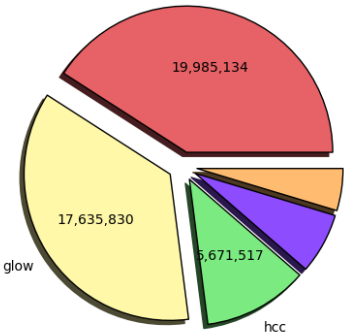
engage (19,985,134)  glow (17,635,830)  hcc (5,671,517)  osg (3,280,776)  sbgri

**Wall Hours by VO (Sum: 82,937,234 Hours)**
53 Weeks from Week 00 of 2013 to Week 00 of 2014

osg
50,263,705
16,685,423
glow
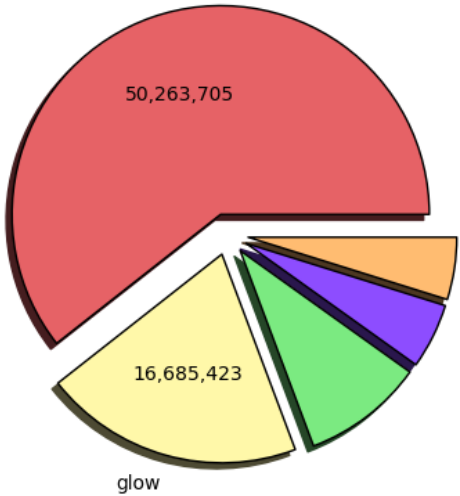
osg (50,263,706)  glow (16,685,424)  engage (7,793,856)  sbgrid (4,194,341)  hcc (3,999,908)

# 2013Q4 OSG-XD Usage

OSG continues to actively support U.S. researchers who are not already affiliated with an OSG community in gaining access to DHTC computing resources. This spans researchers who make their request via XD as well as those that directly contact OSG.

| Month | Active PIs |
|-------|-----------|
| 10/2013 Count | 21 |
| 11/2013 Count | 23 |
| 12/2013 Count | 21 |

| Month | Wall Hours |
|-------|-----------|
| 10/2013 Total | 4,216,123 |
| 11/2013 Total | 4,357,300 |
| 12/2013 Total | 4,210,595 |

In the last quarter, 23 distinct research groups (10 from OSG and 13 from XD) received access to DHTC via OSG and used 12.8M hours (4.0M for OSG and 8.8M for XD).

# Researcher Enabled in 2013 OSG-XD

| Project Name | PI | University | Science Domain | Hours |
|---|---|---|---|---|
| TG-ATM130009 | Phillip Anderson | University of Texas at Dallas | Atmospheric Sciences | 51,221 |
| TG-ATM130015 | Phillip Anderson | University of Texas at Dallas | Atmospheric Sciences | 77,168 |
| TG-OCE130029 | Yvonne Chan | University of Hawaii, Manoa | Ocean Sciences | 15,781 |
| TG-IRI130016 | Joseph Cohen | University of Massachusetts, Boston | Information, Robotics, and Intelligent Systems | 70,536 |
| TG-MCB100109 | Lillian Chong | University of Pittsburgh | Molecular Biosciences | 174,010 |
| TG-CCR120041 | Luca Clementi | San Diego Supercomputer Center | Computer and Computation Research | 12 |
| TG-DMR130036 | Emanuel Gull | University of Michigan | Materials Research | 196,835 |
| TG-DMR120085 | Emanuel Gull | University of Michigan | Condensed Matter Physics | 60,624 |
| TG-MCB090163 | Michael Hagan | Brandeis University | Biophysics | 16,116 |
| TG-MCB090174 | Shantenu Jha | Rutgers, the State University of New Jersey | Molecular Biosciences | 1,223 |
| TG-IBN130001 | Donald Krieger | University of Pittsburgh | Integrative Biology and Neuroscience | 18,713,382 |
| TG-CHE130103 | Jeremy Moix | Massachusetts Institute of Technology | Chemistry | 5,027 |
| TG-PHY110015 | Pran Nath | Northeastern University | Physics | 1,004,429 |
| TG-DMS120024 | Benjamin Ong | Michigan State University | Mathematical Sciences | 68,907 |
| TG-MCB130072 | Robert Quick | Indiana University | Molecular Biosciences | 15 |
| TG-TRA100004 | Andrew Ruether | Swarthmore College | Training | 444,374 |
| TG-IBN130008 | Jorden Schossau | Michigan State University | Integrative Biology and Neuroscience | 4 |
| TG-PHY120014 | Qaisar Shafi | University of Delaware | Physics | 403,126 |
| TG-CHE130091 | Paul Siders | University of Minnesota, Duluth | Chemistry | 56,827 |
| TG-STA110014S | Nancy Wilkins-Diehr | University of California-San Diego | Center Systems Staff | 5 |
| TG-STA120004 | XD Staff | Various | Testing & Integration | 14 |
| XD Total | | | | 21,359,647 |

# Researcher Enabled in 2013
## OSG-VO Direct

| Project Name | PI | University | Science Domain | Hours |
|---|---|---|---|---|
| Duke-QGP | Steffen A. Bass | Duke University | Nuclear Physics | 2,237,773 |
| SPLINTER | Robert Quick | Indiana University School of Medicine | Medicine | 4,006,656 |
| IU-GALAXY | Robert Quick | Indiana University | Bioinformatics | 196,555 |
| RIT | Alexander Arlange | Rochester Institute of Technology | Ramsey Numbers | 836,826 |
| Snowmass | Meenakshi Narain | Brown University | LPC group | 9,972,492 |
| ECFA | Meenakshi Narain | Brown University/LPC group | Particle Physics | 1,744,646 |
| SNOplus | Joshua R Klein | University of Pennsylvania | Physics - Neutrino | 488 |
| DetectorDesign | John Strologas | University of New Mexico | Medical Imaging | 353,847 |
| BNLPET | Martin Purschke | Brookhaven National Lab | Biomedical Imaging | 22,453 |
| UMich | Paul Wolberg | University of Michigan | Microbiology | 793,091 |
| EIC | Thomas Ullrich | Brookhaven National Lab | Particle Physics | 231,815 |
| UPRRP-MR | Steven Massey | Universidad de Puerto Rico, Rio Piedras (UPRRP) | Bioinformatics | 41,183 |
| TG-TRA120041 | | | | 48 |
| Unknown | | | | 4 |
| OSG Total | | | | 20,437,882 |

# Looking Forward

1. How do we identify more researchers who can benefit from access to OSG DHTC ?

2. How do we get access to more opportunistic cycles? (seem to have hit some sort of ceiling at ~15K cores)

*What transformational changes do we need to make to achieve a 50% increase in US researchers using DHTC via OSG in 2014?*