

# ASP2022 HTC Wrap-up

*The African School of Fundamental Physics 2022*

*Nelson Mandela University, Gqeberha, SA*

*December 8, 2022*

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# Some Useful Resources

- HTC tutorial page will be up for the time being
  - If you want to practice, we'd suggest you taking maximum advantage right now
  - [https://osg-htc.org/dosar/ASP2022/ASP2022\\_Materials/](https://osg-htc.org/dosar/ASP2022/ASP2022_Materials/)
- You could apply for a real HTCondor account for a long-term grid access at
  - <https://www.osgconnect.net>

# Computing Infrastructures

- Local Laptop/Desktop – Short jobs w/ small data
- Local Cluster – Larger jobs and larger data but subject to availability
- HPC – Prime performance with parallelized code
- HTC – Sustained computing over a long period for serialized workflows
- Cloud – Need deeper permission on an OS and/or have deeper pockets

# Some Examples of Academic CIs Worldwide

- **HTC**

- EGI (formally European Grid Initiative)
- OSG (Open Science Grid)
- ASGI (Asia Pacific Grid Initiative)
- NorduGrid
- Earth System Grid (ESG)
- Many other regional and national infrastructures

# Some Examples of Academic CIs Worldwide

- **HPC**

- ACCESS (**A**dvanced **C**yberinfrastructure **C**oordination **E**cosystem: **S**ervices & **S**upport )
- PRACE (Partnership for Advanced Computing in Europe)
- Compute Canada
- Greek Research and Technology Network (GRNET)
- Centre for HPC (Cape Town, South Africa)
- Many other national infrastructures

# Some Examples of Academic CIs Worldwide

- **Cloud**

- EGI Federated Cloud
- NeCTaR – National eResearch Collaboration Tools and Resources
- Jetstream (Part of ACCESS)
- SwissACC (Swiss Academic Computing Cloud)
- Many other national cloud infrastructures

# Wrapping up the grid session

- You have exercised several job submissions
- And made changes to your jobs to allow self controlled job submissions
- Seeing your jobs on condor\_q was elating, wasn't it?
- So far you have just highlighted and pasted the examples listed in the tutorial page
- But you can certainly make changes to fit your own purposes!
- The tutorial taught you what to do to use the grid system that sits behind the scenes
- Need to take this skill one step further
- This is exactly what we do for a profound discovery!

# Further Pointers

- The ASP grid school tutorial page is always the place to return to refresh your memory
- Most of you must have completed a lot of the exercises in the ASP grid school page
- The next step is to take your simple jobs to more sophisticated research project jobs through the OSG connect
- Once you complete the above, you can then take on making the change to the behavior of the standard universe looking at the condor manual
- Important thing is not let it slide but keeping it up!



# What a once-in-a-life time experience!!

- It has been amazing couple of weeks!!
- You all have learned
  - High Energy Physics in general
  - Standard Model and underlying physics
  - Higgs Physics
  - Super-symmetry
  - Use of Monte Carlo simulations
  - Experiments and data analysis
  - Computing grid and its use for your science
- You have changed dramatically in the short period of time!
- You have made good friends from all over Africa
- You will be the ones advancing science in this continent
- Keep not only the knowledge but also the spirit of ASP!
- Look for other opportunities to work closely!

Totally impressed with y'all!!

Nice to have met you all!

Have a safe trip back home!

See you soon somewhere!

# Questions on HTC?

- Questions? Comments?

– Feel free to ask us questions now or later:

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