HPC working seminar for physicists



Scientific Computing Department at HIM

Dr. Dalibor Djukanovic
Dr. Peter-Bernd Otte

bi-weekly meeting – 14.9.2021



Bi-weekly working seminar

- intendent for all students and postdocs on Himster 2
- beginners and experts
- compact (!): 15 mins (+15 for presentations)
- possible topics:
 - best analysis practices
 - news from the maintainer side
 - and all others you suggest
- bring people together tackling the same problems

Today and news

Today maintenance day, no demos

- GPFS-fileserver will be retired at some point.
 - /project
 - compute node: 16.9.: read-only, 5.10.: gone
 - Login nodes: 16.9.: read-only

- New:
 - help for activation or reset of privacyidea by us

Hot Topics we are working on

Singularity containers for analysis (BES, Panda)

- Lustre mount GSI <-> HIM via T-Bit Link
 - Test IP-connection with 10GBit/s
 - Lustre mount on special head nodes
 - next: user mapping

- visualisation of usage statistics via Elastic Search
 - together with ZDV

Software (1/2): Modules on Himster

- echo \$MODULEPATH
- export MODULEPATH=\$MODULEPATH:/cluster/him/modulefiles/
- module avail
 - Remarks: D = standard module, aliases exist, L = loaded

- module avail 2>&1 | wc -l
- module load tools/Singularity/
- module list

Software (2/2): cvmfs

Always lastest software from GSI and CERN:

- cd /cmvfs
- tree -L 2 bes3.ihep.ac.cn fairsoft.gsi.de geant4.cern.ch panda.gsi.de | more

ready to run natively on Himster 2 or via Singularity

Next

- Next meeting on 28.9.
 - presentation of our users
 - singulalrity usage for EMP
 - hand in your topics!
- Next scheduled maintanance 5.10.

Present your work group

work group title working on:	detector simulation / data analysis /
picture	
all involved:	 names project headline technique (group internal analysis framework / python scripts / fancy algorithms /)

• Please return until end of next week