HPC working seminar for physicists



Scientific Computing Department at HIM

Dr. Dalibor Djukanovic
Dr. Peter-Bernd Otte

bi-weekly meeting – 22.2.2022



Today's Topics

- 1. Express Q
- 2. TBit link
- 3. Data copy between data centers
- 4. Tools for Physicists 2022
- 5. your questions / discussion / requests to the maintainers

- compact in time (15mins + user questions/discussion).
- bring people together tackling the same problems
- minutes: https://www.hi-mainz.de/research/computing/hpc-working-seminar/

Developer Queues

- https://mogonwiki.zdv.unimainz.de/dokuwiki/start:working on mogon:partitions#mogon ii
- Immediate access, 4h walltime

• Start on head node interactive job:

```
srun --pty -p devel -A m2_him_exp bash -i
```

Hot Topics we are working on

- Lustre mount GSI <-> HIM via T-Bit Link
 - Test IP-connection with 10GBit/s
 - Fixed user and group mapping for first tests
 - Who else wants to participate (GSI account necessary)?

Hot Topics we are working on

- Problematic file transfer between data centers (Jülich, GSI, Mainz)
 - → in the pipeline (GridFTP, UFTP or SCP?)
 - BES3, LatticeQCD

- (visualisation of usage statistics via Elastic Search) (future plans)
 - together with ZDV

Tools for Physicists 2022

- "Be prepared for the real lab work –
 know how to tackle the problems."
- 11 independent hands-on topics.
- Get in touch with the pros in their field.
- Focusing on thesis starters

(Bachelor, Master, PhD), Postdocs welcome.

HPC-Group:

- HPC
- Git + CI



Technisches Zeichnen Mo, 25.3. 14:15, Hörsaal KPH



Mathematica We, 12.6. 14:15, Hörsaal KPH



Introduction to COMSOL Multiphysics We, 10.4. 14:15, HIM Conference 1



Mikrocontroller - Grundlagen und Beispiele Mi, 19.6. 14:00, Inst. f. Physik 01.430



Boost your Analysis with High Performance Computing We, 17.4. 14:15, HIM Conference 1



Schaltungssimulation mit "Spice" Mi, 26.6. 14:00, Inst. f. Physik 01.430



3D Printing and Designing Basics We, 8.5. 14:15, HIM Conference 1



Elektromagnetische Störungen und Rauschen in physikalischen Messaufbauten Mi, 3.7. 14:00, Inst. f. Physik 01.430



Introduction to Git and GitLab We, 15.5. 14:15, HIM Conference 1



Erstellung elektronischer Leiterplatten mit "Eagle"
Mi, 10.7. 14:00, Inst. f. Physik 01.430



Statistics We, 22.5. + 29.5. + 5.6. 14:15, Hörsaal KPH

Next meeting, 8th March 2022

Only technical / short meetings during semester break

hand in your topics!

- 23.2.—24.2.2022:
 - Mogon / Himster 2 maintenance days
 - THFL storage upgrade