

# ML Computing Resources @ DESY

Yves Kemp  
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# A very brief overview on DESY computing resources

- Maxwell: The HPC infrastructure at DESY
  - (mostly) for photon science and accelerator. Little HEP (mostly for ML)
  - ~30k CPU cores with high RAM, ~100 GPUs
  - „bring-in“ model: Different groups contribute to a common system with own resources. IT also provides some general resources
  - <https://maxwel.desy.de/>
- NAF / BIRD + Grid: The High Throughput Compute infrastructure at DESY
  - (mostly) for HEP
  - ~30k CPU cores, ~10 GPUs
  - IT organizes purchases, fair-share to user groups based on political contributions. Some “bring-in“ by DESY groups and UHH.
  - <https://naf.desy.de/> <https://grid.desy.de>

# Maxwell GPU systems

6	cfel 2xTesla (K20 and/or K40)
10	cms 1xP100
3	cssb 2xP100
3	display 4xQuadro M6000
18	exfl 1xGP100GL
4	exfl 1xTesla (K20 and/or K40)
1	exfl 2xGP100GL
1	exfl 2xTesla (K20 and/or K40)
1	hgz 2xTesla (K20 and/or K40)
2	nova 2xQuadro M6000
27	p3a 1xP100
1	p3a 1xTesla (K20 and/or K40)
1	p3a 4xP100
4	IT 1xP100
10	IT 1xV100
1	IT 1xTesla(K20 and/or K40)
2	IT 2xP100
2	IT 2xTesla (K20 and/or K40)

## Summary:

- Many different models, versions
- Mostly one or two GPU/server, some rare with >2
- Different owner groups (sharing possible)

# NAF

- 4x Server with 1xP100
- 9x Batch Server with 1xGeForce 1080TI

# My proposal

- Interested people should get access to Maxwell
  - ... Do people already have a Maxwell account?
  - If not, need to finally check best way of getting account
  - ((Federations????))
- Using Maxwell on best effort

# Nvidia? Only Nvidia?

- Mostly people use and want Nvidia
- We have one AMD machine: 1xAMD Radeon Instinct MI25 Vega64
  - Anyone interested?