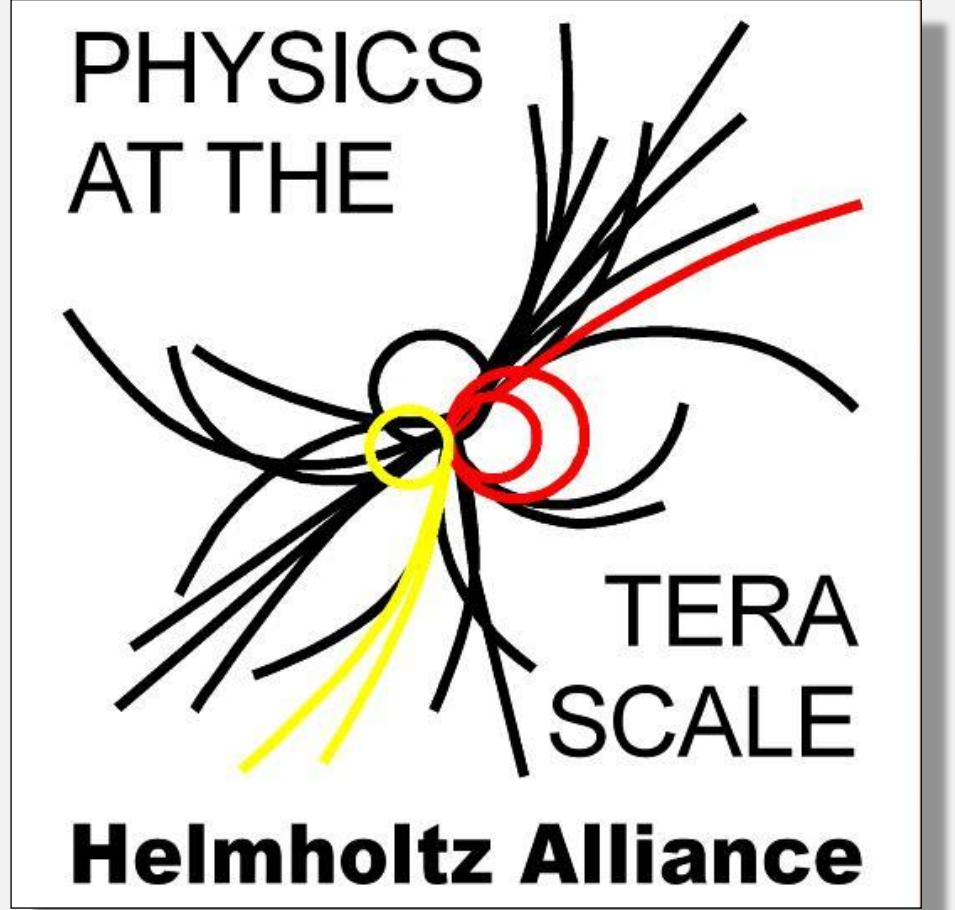


# Grid Computing in the HGF Alliance



## Original Scientific Goals and Work Packages

### Improved Grid

- Virtualization
- Application-driven Monitoring
- Development of NAF-Tools

### Data Storage + Retrieval

- Mass storage
- Data Access

### Virtual Computing Center

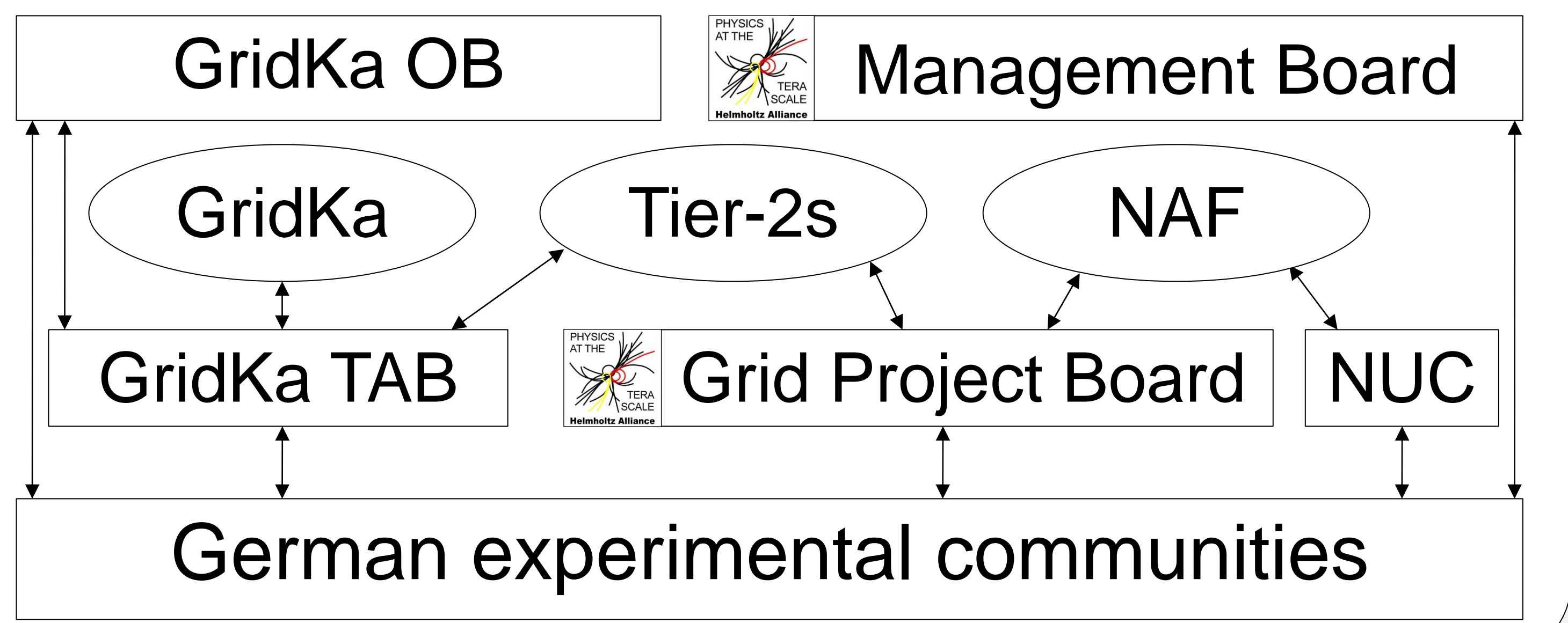
- Computing Resources Tier-2
- National Analysis Facility
- High Performance Network
- User Friendliness
- Grid-based Mass Storage

### R&D on Grid tools:

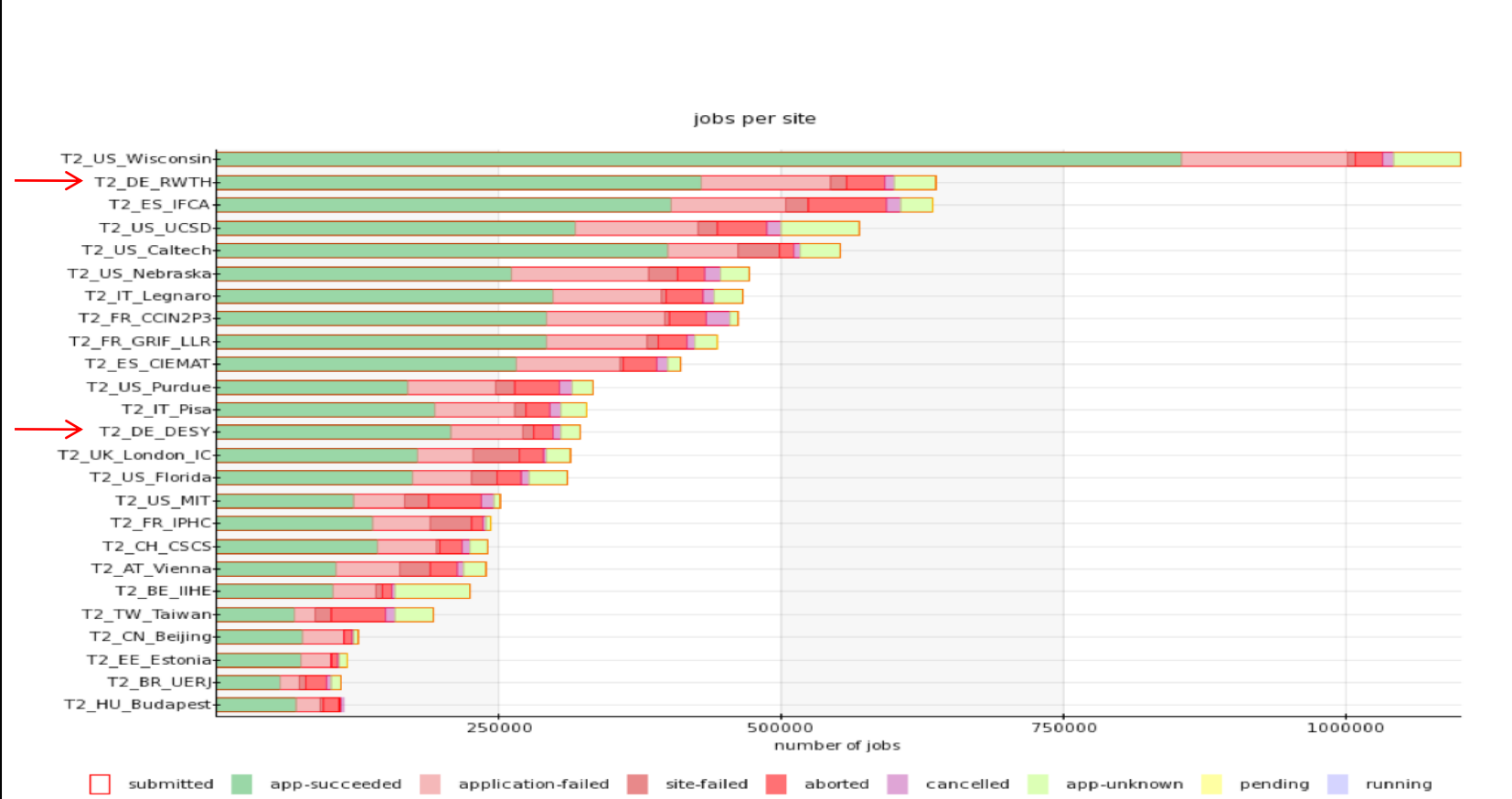
- Virtualization of Resources
- Application Driven Monitoring
- Data Access Management

### Grid Training

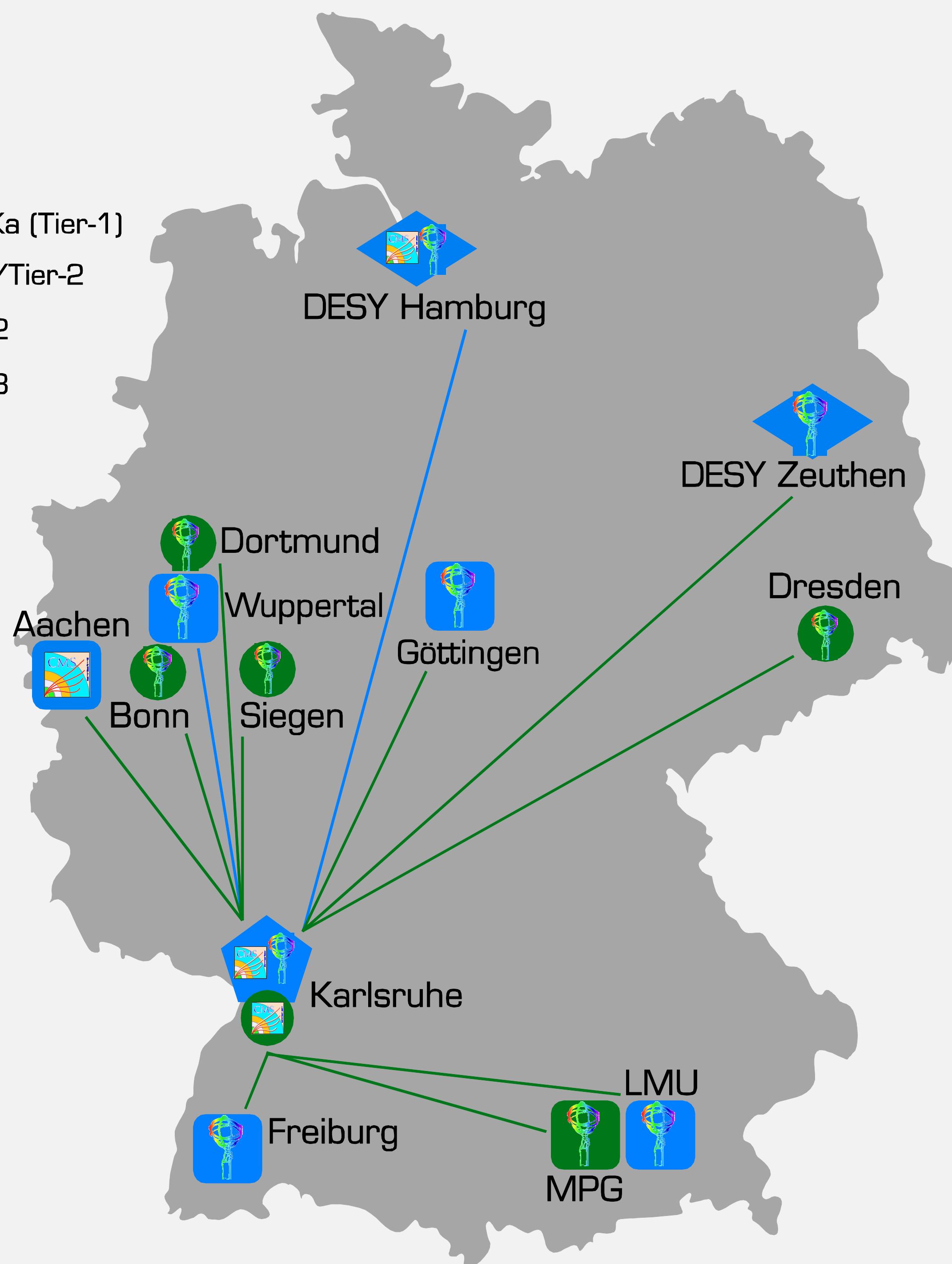
## Organizational Structure in Germany



## CMS MC Tier-2 jobs (Jan – Oct 2009)

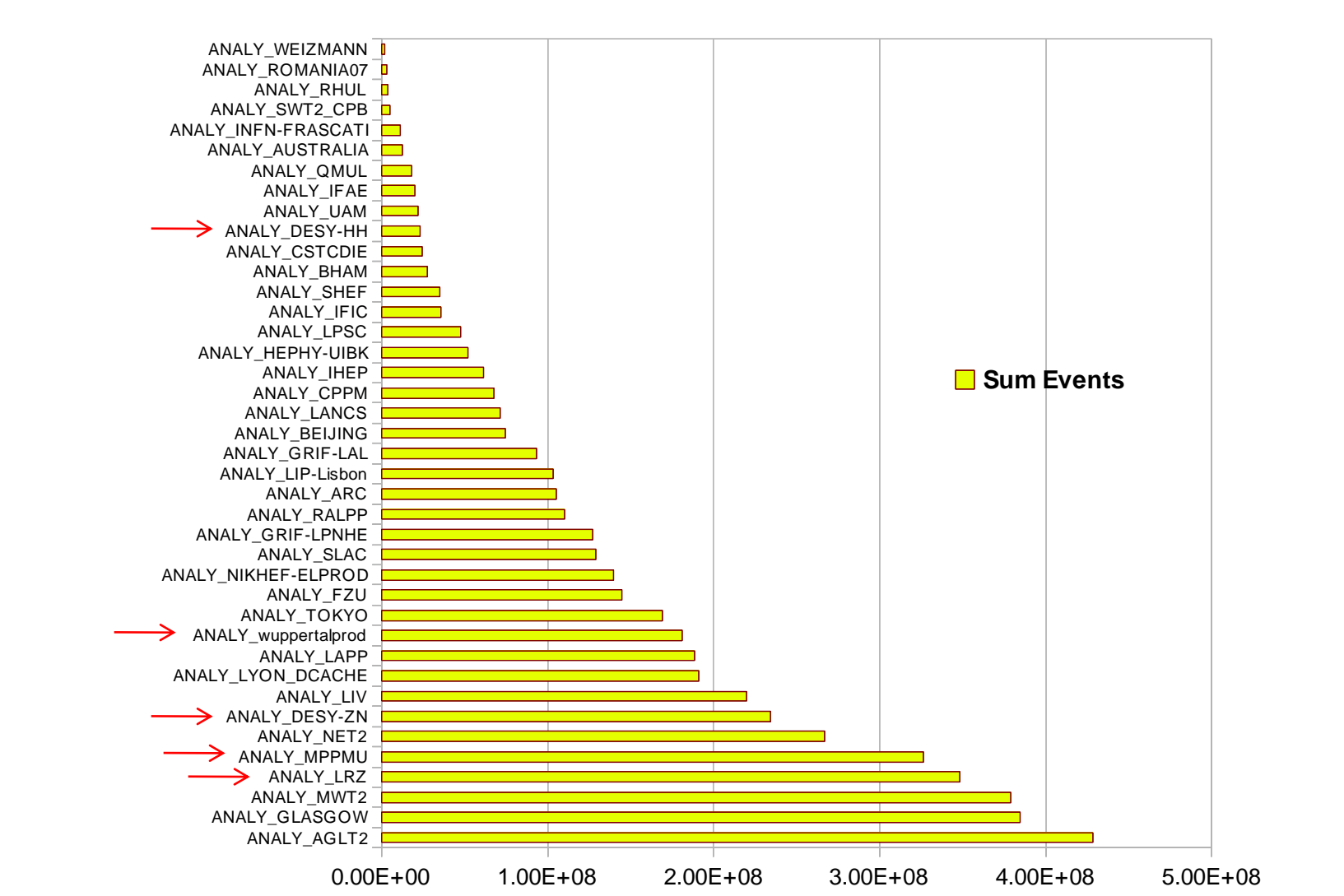


- ◇ GridKa (Tier-1)
- ◇ NAF/Tier-2
- Tier-2
- Tier-3

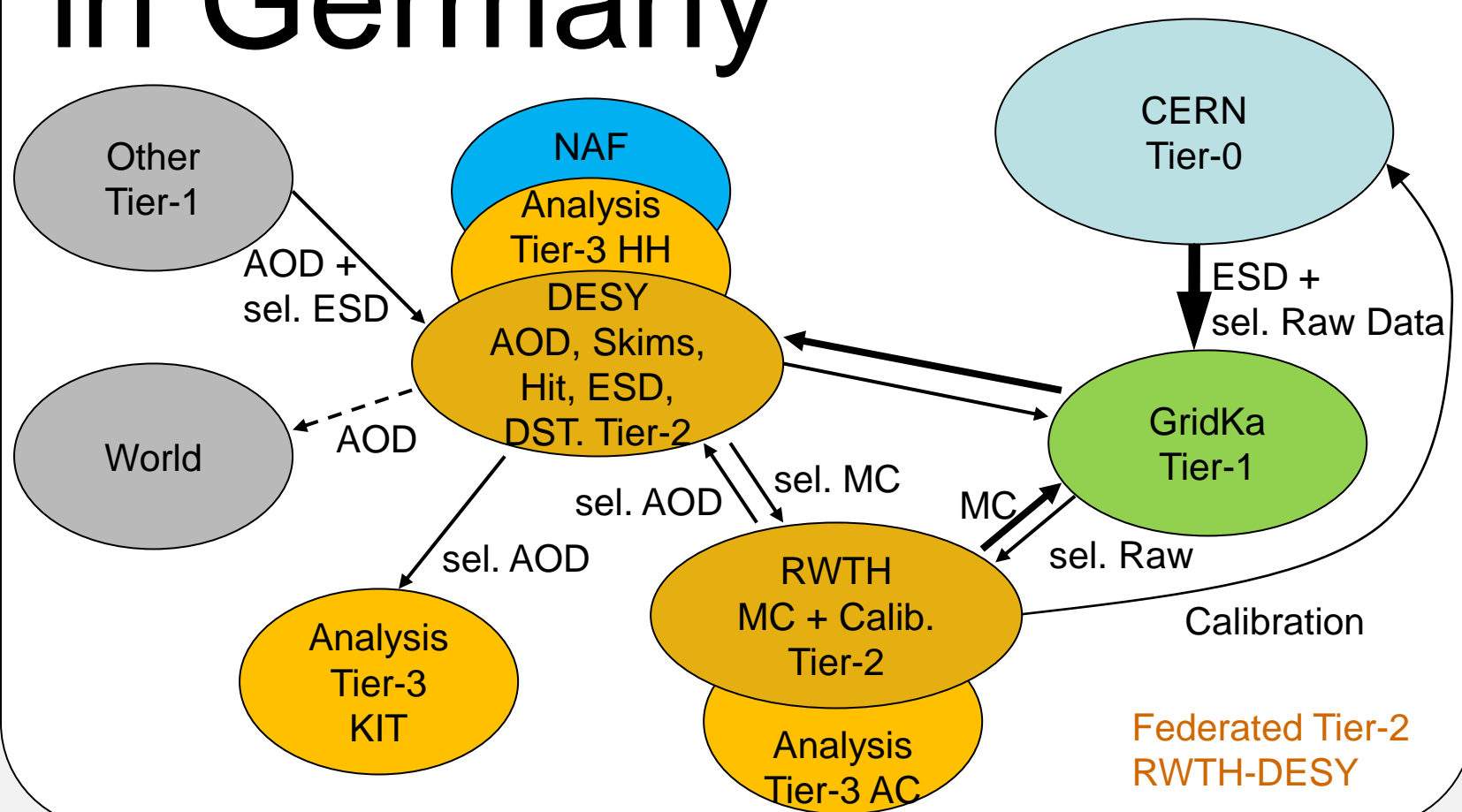


blue color: HGF funding

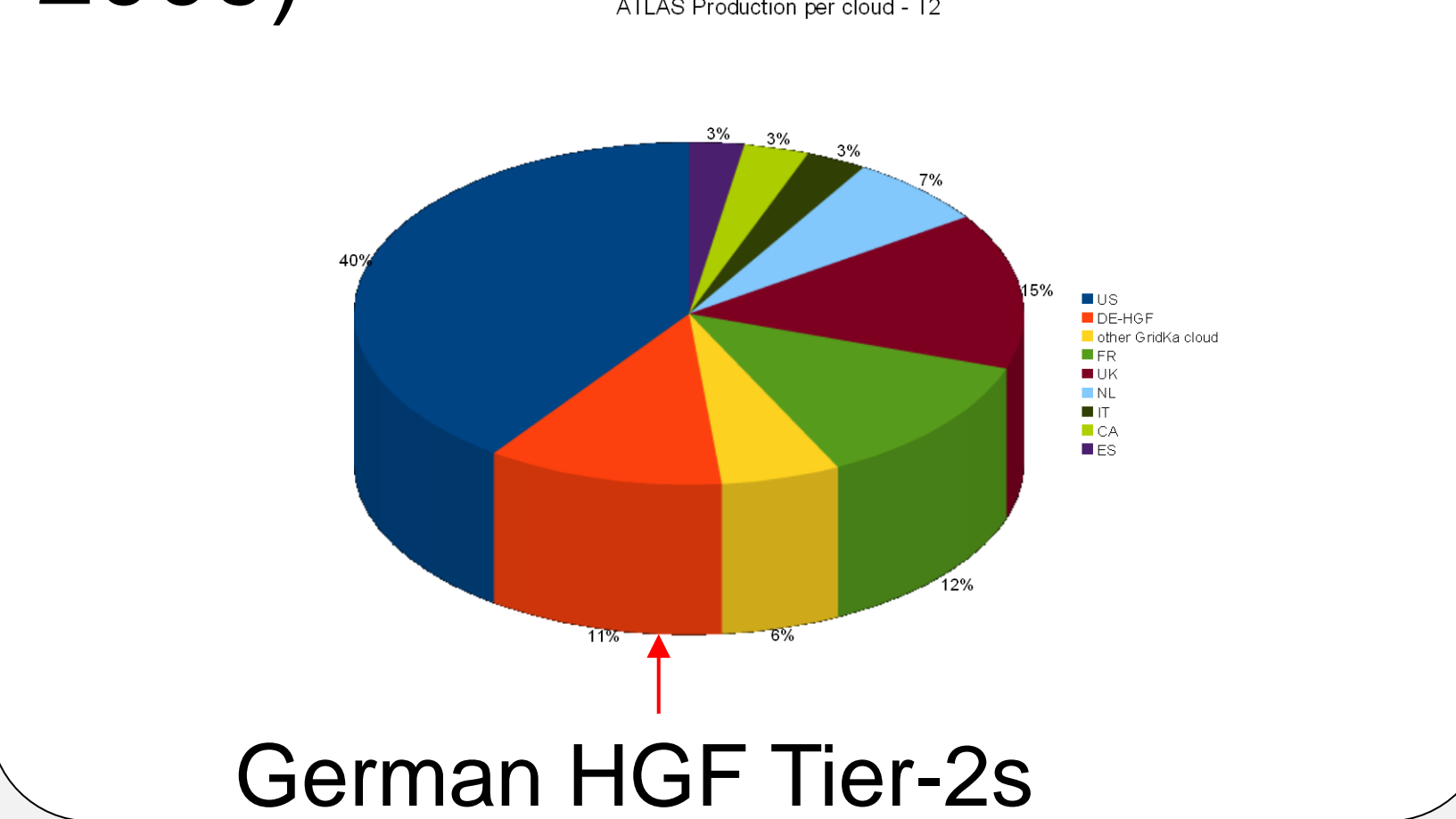
## ATLAS User Analysis Test Nov 2009 - Events per site (top 40)



## CMS Tier-2 Structure in Germany



## ATLAS Production (Jan-Nov 2009)



## Activities:

- Building Tier-2 Structure: Aachen, DESY, Freiburg, Göttingen, LMU, Wuppertal
- Experimental Support for NAF (-> see poster)
- High Performance Network: all institutes
- dCache: RWTH, LMU, DESY, KIT (-> see poster)
- Virtualization: DESY, KIT (-> see poster)
- Monitoring: Aachen, Göttingen, Hamburg, KIT, Wuppertal (-> see poster)

## Training, Talks and Schools

- Talks at conferences, e.g. CHEP 2009
- Annual Grid Computing School 'GridKa School' at KIT (incl. courses on NAF, virtualization and dCache)
- Advanced dCache trainings