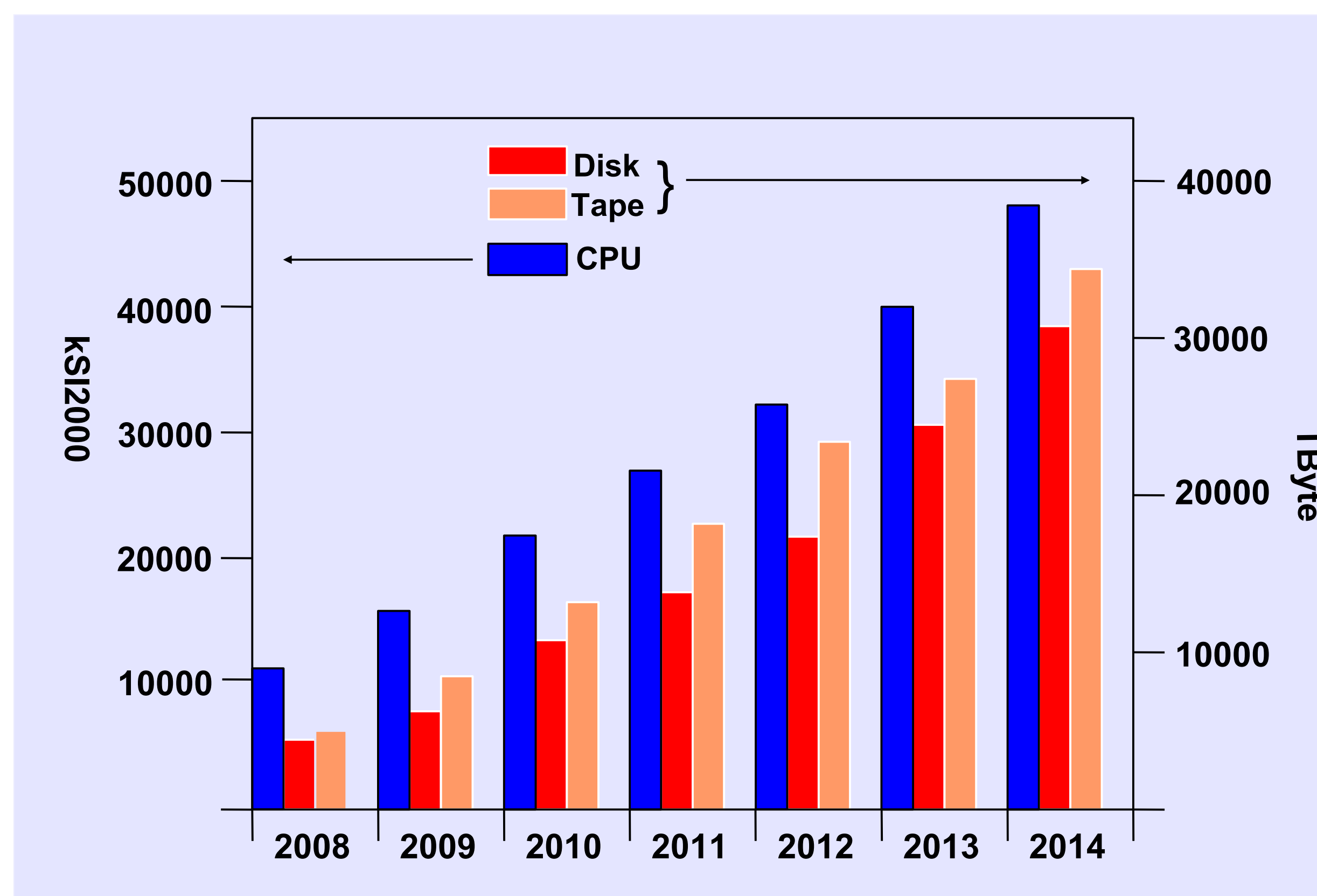
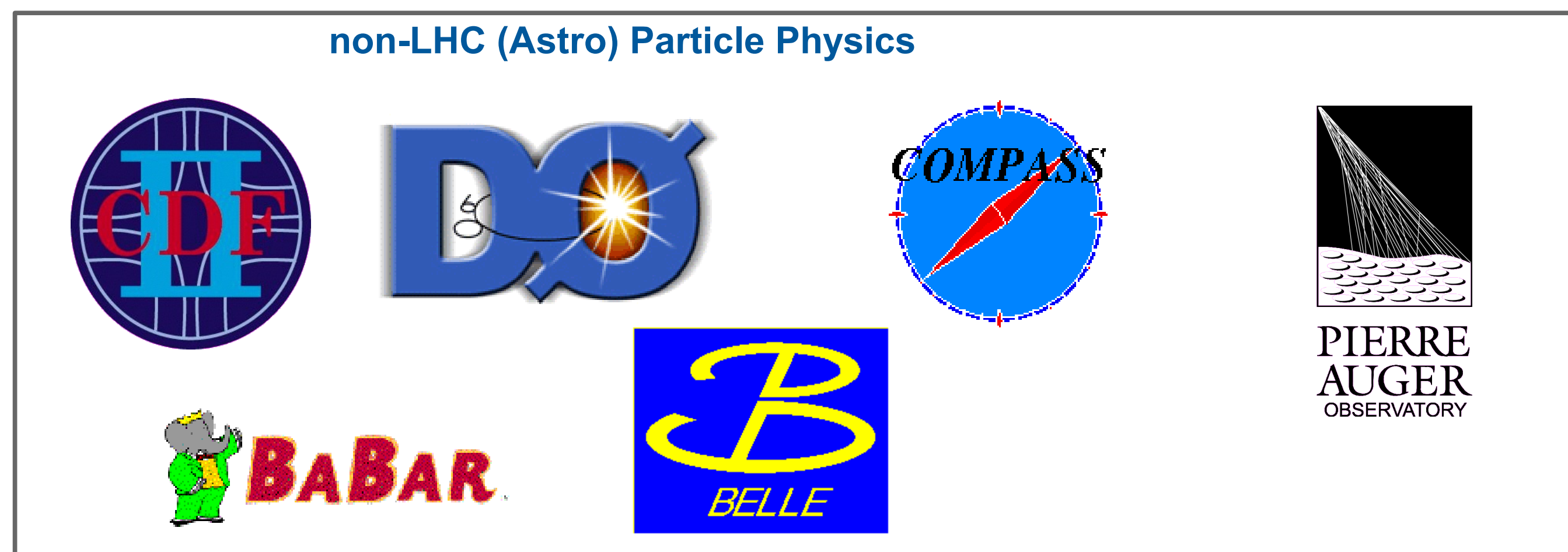
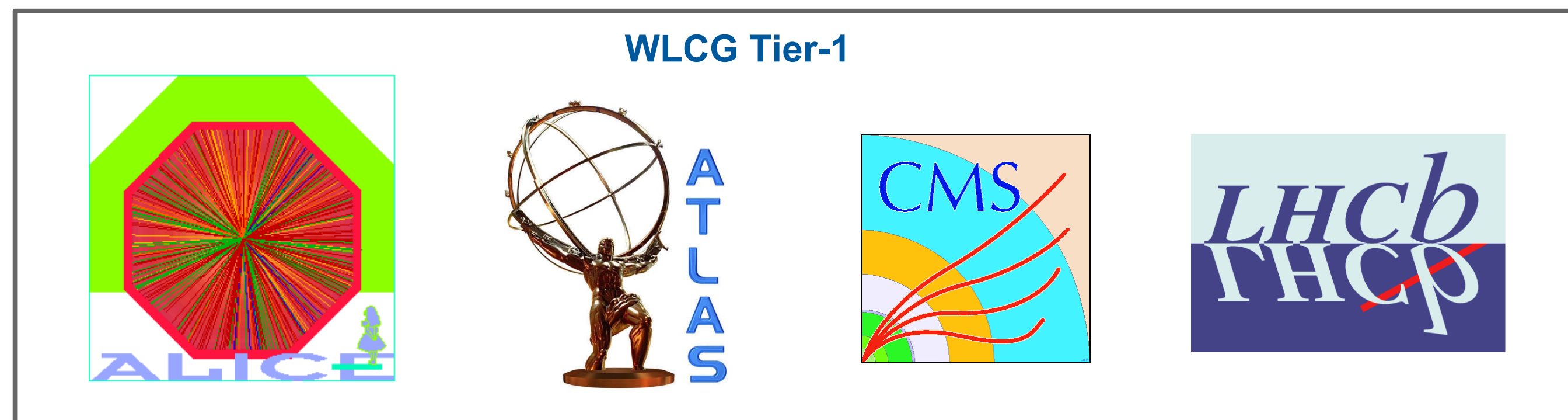


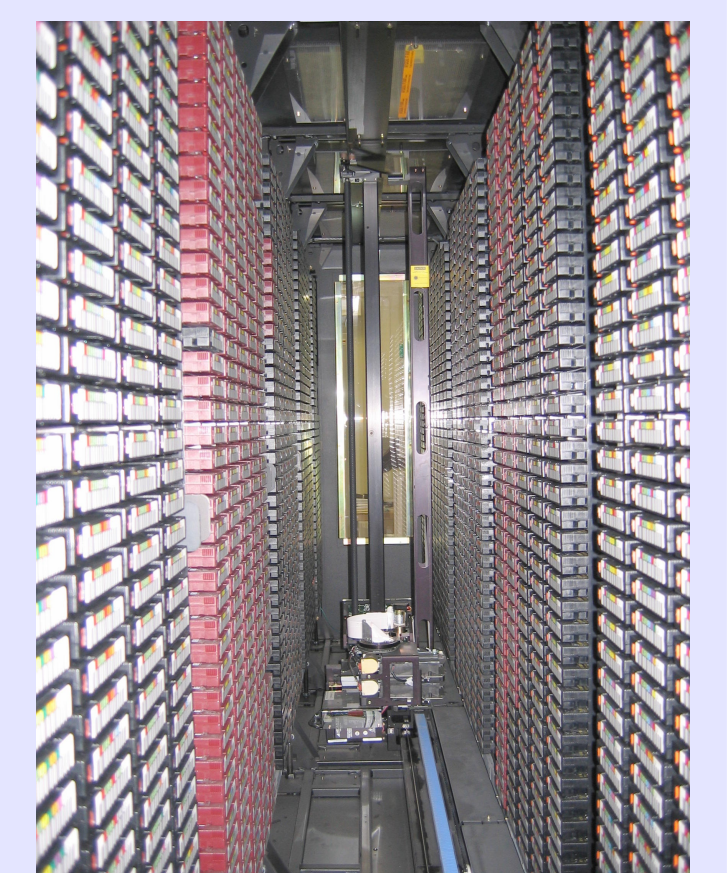
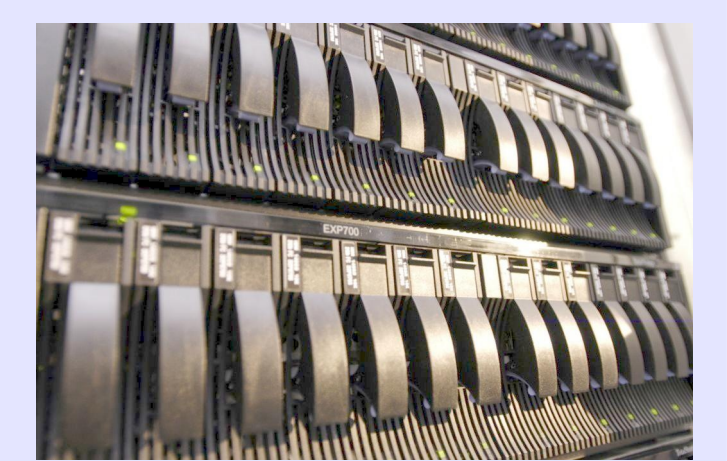
Large-scale Facility GridKa

Storage, computing power and Grid services for Elementary Particle Physics



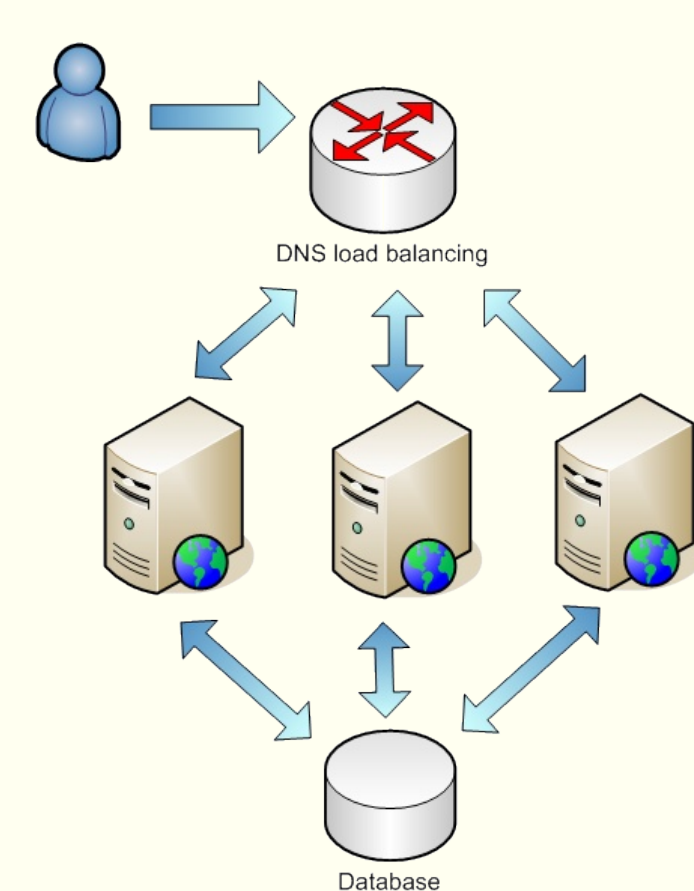
Increasing compute and storage capacities

- WLCG MoU pledges for Alice, Atlas, CMS and LHCb
- Requested capacities for non-LHC Particle Physics
- Astro Particle Physics and D-Grid
- Challenges:
 - Scaling of storage systems
 - Scaling of Grid services to local and regional requirements
 - Compute centre automation and monitoring



Highly reliable Grid services

- Regional core services:
 - File Transfer Service (FTS) and file catalogs (LFC)
 - Oracle RAC backend
 - Multiple frontends
 - Top level BDII
 - 4 hosts round robin DNS
- VO services:
 - VOMS
 - VO Boxes
 - Metadata DB services (e.g. conditions DB)
 - Oracle RAC, multiple hosts per experiment
 - DB proxy service for CMS
 - multiple hosts



Excellent GridKa WAN connectivity

