Supporting Large-Scale eScience in the Netherlands

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Nikhef

- Dutch National Institute for Subatomic Physics
- Particle & Astro-Particle Physics
- Gravitational Waves
- Detector R&D
- Mechanical and electronics design
- Cleanrooms & large workshop
- Houses part of AMSIX
- Partner in national e-infrastructure (lead by neighbour SURFsara)
- Involved in WLCG from beginning
Physics Data Processing

- Separate group within the institute
- Support and run grid cluster
  - LHC: ATLAS, LHCb, ALICE
  - AUGER, ANTARES
  - LVC, ILC, DUNE
  - Xenon1T
  - weNMR, MINE
- Stoomboot
- Strong AAI involvement
- Experimental Hardware
- Scientific Software
Experience with OSG
Experience with OSG

- Generally a pleasure
- Xenon1T worked first
- Very smooth to add LIGO
- Clear communication
- Professional attitude

- Privacy and security required work
  US is a single legal domain, but
  trust and AAI more complex internationally
- StashCash issues related to AAI policy
- Now fixed
Future

- Continue fruitful collaboration with OSG
- Grid is increasingly a niche infrastructure
- Finding the right new model is a challenge
- OSG success outside of HEP shows what is possible
- International context has additional challenges

- Have to look for common solutions
  - AAI
  - Costing