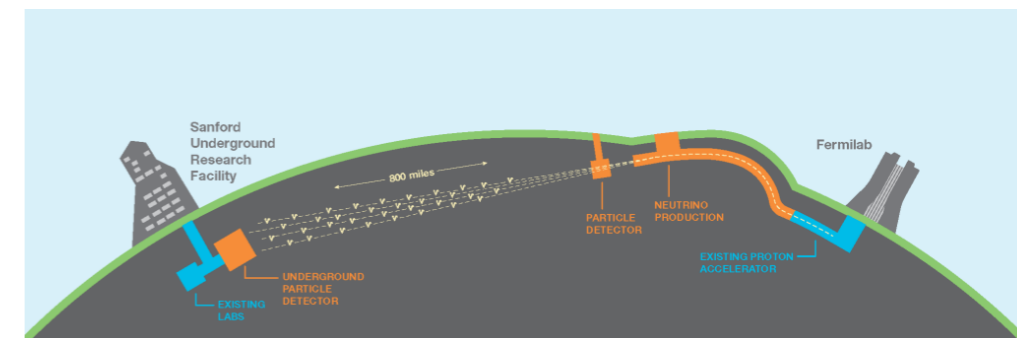
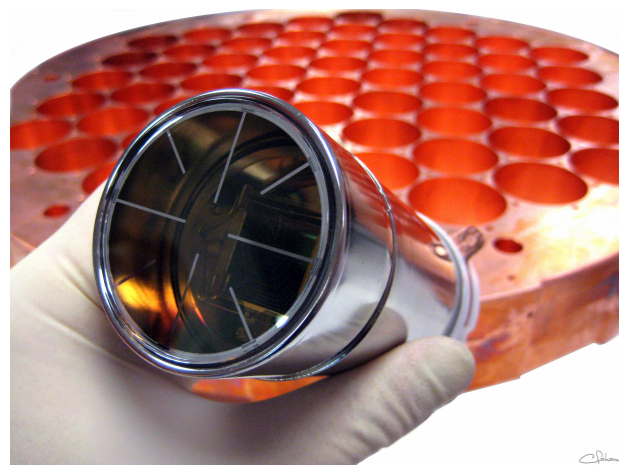
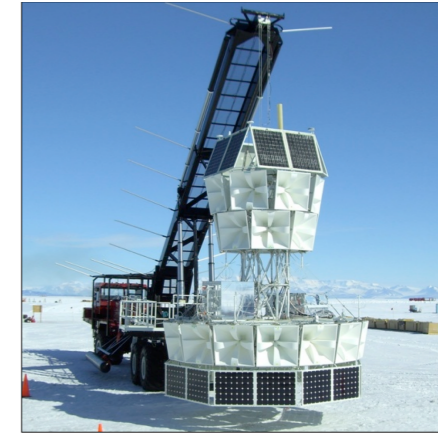
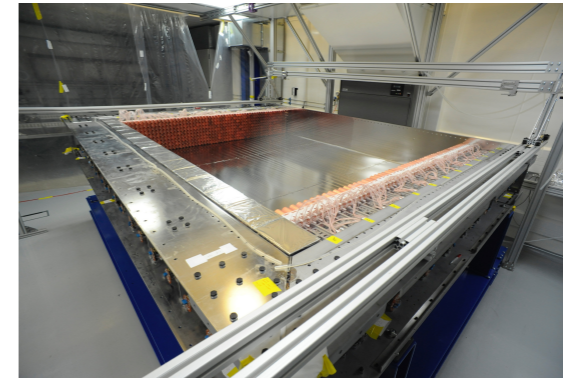
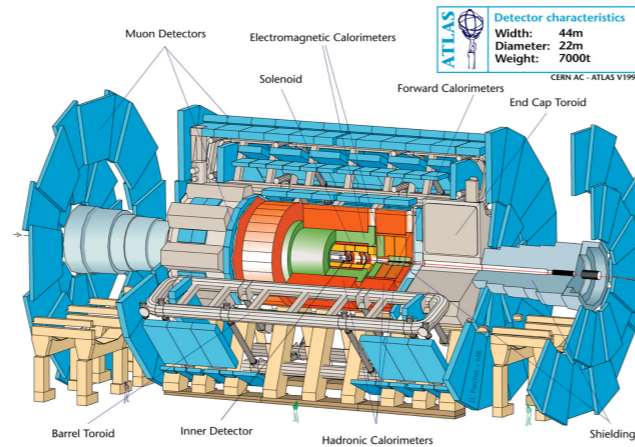
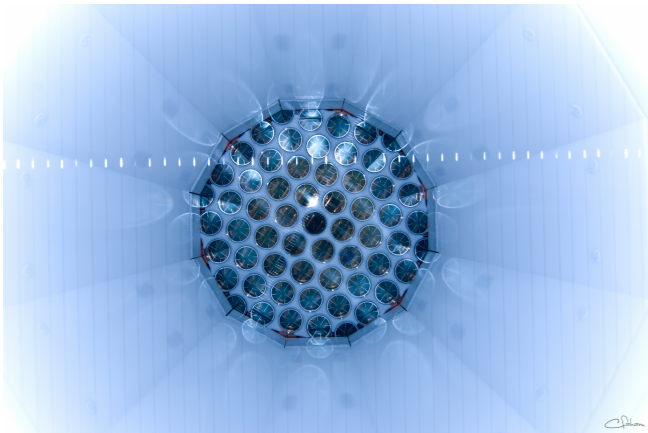


- One of the largest groups in the country:
  - 50 academics, research and technical staff, ~40 PhD students (and counting!)
- 2 International Spokespersons, 1 Deputy Spokesperson, 4 UK PIs
- Engineers providing critically important support for our physics programme
- Close collaboration with other departments: MSSL, Med. Physics



<http://www.hep.ucl.ac.uk/>



- Energy Frontier with **ATLAS** at **LHC**
- Neutrino Oscillations with **NOVA**, **DUNE** and **CHIPS** (**MINOS** legacy!)
- Neutrinoless Double Beta Decay with **SuperNEMO**
- Muon Physics: Magnetic moment (**FNAL g-2**); Charged Lepton Flavour violation (**Mu2e**, **Mu3e**)
- Direct detection of dark matter with **LZ** experiment
- Ultra High Energy neutrinos at South Pole (**ANITA/ARA**)
- **Theoretical studies** of strong interactions, QCD, and physics beyond the standard model
- Novel accelerator technologies, **AWAKE**
- Novel **DAQ** (Data Acquisition) approaches inside and outside of particle physics
- Developing novel instrumentation for future experiments and their applications in **proton cancer therapy** and **muon tomography**
- **Weak Measurements** in Quantum Mechanics
- **Data Science** for HEP, industry and medicine