Imperial College Group Introduction

- Personnel
  - We joined the DUNE collaboration in autumn 2018, joining Prof Ken Long who has been a collaboration member for several years
    - https://indico.fnal.gov/event/16526/session/0/contribution/16/material/slides/0.pdf
  - Academics
    - Alex Tapper: CMS SUSY and Level-1 Trigger; PhD on ZEUS DIS xsecs
    - Morgan Wascko: T2K, HPTPC, SciBooNE, MiniBooNE
  - Research Staff
    - Patrick Dunne: T2K Oscillation Analysis, HPTPC R&D
    - Greg Iles: CMS Trigger and DAQ (mainly in support of Dunne so far)
  - Future
    - We are on the UK STFC DUNE construction project, and have requested resource to hire 1 RA (5 years) and 1 engineer (5 years)

Imperial College Contributions to DUNE DAQ

- Past/current work
  - Firmware work on data compression (Dunne with support from Iles)
    - Dunne gave a talk on the FPGA co-processor in the CDR DAQ review
    - https://indico.fnal.gov/event/18505/contribution/14/material/slides/0.pdf
  - Looking to take a role in firmware integration and vertical slice-test
- Future work
  - Coordinating within UK plan, as detailed e.g. on slides 11–12 of Dunne's CDR review talk
  - Interested in contributing to the near detectors as well, both DAQ and more generally
  - We have expertise in firmware, system design, and software for trigger and DAQ systems
    - Built and ran demonstrator systems for CMS trigger and tracker and (FPGA) accelerated computing for track fitting, etc.