

Outline of DAQ workpackage

- **Groups:** UCL, Imperial,...?
- **Scope:** develop realistic readout for LLC calorimeter. Speed, number of channels, transfer of data, calorimeter design (e.g. Si-W, MAPS).
- **Hardware and costs:**
 - **Fibres to transport digitised data from VFE to off-detector receiver (chip-to-chip)?**
FEE to off-detector, use fibre but could use dedicated point-to-point or direct connection to network?
 - **Off detector receiver - PCI card (PCI Express) in standard PC with switches to route to an alive PC?**
£50k prototyping, £100k for larger scale tests.
 - **UCL people:** (J. Butterworth), M. Lancaster (20%), M. Wing (30%), M. Postranecky, M. Warren, New RA (significant hardware contribution)
 - **Effort:** Engineering - M. Warren (30+50+50)% and M. Postranecky (30+30+50)%.
 $6 \times \text{£}25 = \text{£}150\text{k}$. For fabrication of boards (at MSSL?).
RA for three years $\text{£}40\text{k} \times 3 = \text{£}120\text{k}$ (share with simulation w/p)
 - **Travel:** Low(?) as mainly within the UK; (same as Paul) £5k per year, £5k for beam test travel, total £20k

Simulation/case studies needed for proposal

Decide what can/needs to be done and assign names to do this. (NB. not much LC simulation experience at UCL and IC.)

- Data rates? UCL can look at rate of $\gamma\gamma$ events per bunch crossing.
- Data rates? Other processes should be looked at?
- Threshold suppression of data; C. Fry has looked at this... IC/UCL/Cambridge?
- Something else?