## LHCb Responsibilites

- Geant4 within LHCb, overall framework
  - Physics aspects, maintenance, liaison
  - Tuning, physics lists, & etc.
  - Benchmarking and regression testing
  - Requires significant amount of technical work, interaction with new data presentation framework
  - Data management (previously Mark Slater)
- Charmless B decays WG, trigger liaison (Jimmy McCarthy)
- Rare Decays WG, Monte Carlo liaison (Luca Pescatore)
- Ongoing participation in analysis reviews
- Editorial Board deputy chairperson (NKW)

## **Upgrade**

- Upgrade, approved by Science Board July 2014
  - Details under negotiation with STFC
  - Radiation hardness testing on cyclotron (VELO and RICH)
  - Firmware for RICH front end

## **Analyses**

- Analyses rare decays, charmless B decays, electroweak
  - Jimmy McCarthy, (y3)  $\Lambda_b \rightarrow \Lambda \eta / \eta'$
  - Luca Pescatore (y2)  $\Lambda_b \rightarrow \Lambda \mu \mu$ , incl.low q<sup>2</sup> and  $A_{fb}$
  - Pete Griffith (y2) Λ<sub>b</sub>→pKμμ (and related)
  - Nathanael Farley (y1) B<sup>+</sup><sub>C</sub> decays
  - Simone Bifani, electroweak, W→ μv and Z → μμ production crosssections (just → JHEP)
  - Simone, Luca,  $R_{K^*} B^0 \rightarrow K^{*0} \mu \mu / B^0 \rightarrow K^{*0} ee$
  - (and Sasha's paper on  $\chi_b$  accepted by JHEP last week)
  - + ...