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| **Summer Placement Project Proposal** |
| Supervisor(s): Dr Malcolm John  Nominees in case of absence: Dr Paolo Gandini.  Duration of Placement: 4 July to 23 September 2016  Date restrictions: None |
| **Section 1: Project description:**  Project title: The LHCb experiment  The LHCb experiment is one of the major LHC experiments at CERN. Oxford is a founding member of the international collaboration and remains a major group, contributing to both the analysis of the current data and simulation and design projects for future upgrades.  It is proposed that the student joins the LHCb group to work on either data analysis or simulation studies. The current data analysis will focus on hadronic decays of B mesons which LHCb is specially designed to measure. Simulation work will concentrate on the reconstruction of hadronic decays of W bosons which is a novel area for the experiment. |
| **Section 2: Special requirements (skills and experience required):**  Required skills: The work will be computer based and some experience with c++ and python is highly desired.  Desired skills: Prior exposure to the particle physics application, ROOT, is useful but not mandatory. |