

Top quark physics at the LHC with the CMS detector



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Declaration

I declare that the work in this dissertation was carried out in accordance with the Regulations of the University of Bristol. The work is original except where indicated by special reference in the text and no part of the dissertation has been submitted for any other degree. Any views expressed in the dissertation are those of the author and in no way represent those of the University of Bristol. The dissertation has not been presented to any other University for examination either in the United Kingdom or overseas.

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1. Introduction

2. Theoretical background

2.1 Standard Model

Yet to be written...

3. The LHC and the CMS detector

3.1 The LHC

The LHC is the big machine.

3.2 The CMS Detector

and here I write more ...

3.2.1 Tracking

... and some more ...

3.2.2 Calorimetry

... and some more ...

3.2.3 Muon Systems

... and some more ...

4. High level trigger development for Top Physics

5. Top Quark mass measurement

6. Differential cross section measurement

7. Conclusions