

Search for long-lived scenarios of dark matter and supersymmetry in final states with jets and missing transverse momentum in the CMS detector

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Abstract

LHCb is a b-physics detector experiment which will take data at the 14 TeV LHC accelerator at CERN from 2007 onward. . .

Declaration

This dissertation is the result of my own work, except where explicit reference is made to the work of others, and has not been submitted for another qualification to this or any other university. This dissertation does not exceed the word limit for the respective Degree Committee. Say what I worked on.

Christian Laner

Acknowledgements

Of the many people who deserve thanks, some are particularly prominent, such as my supervisor. . .

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Chapter 1.

Introduction

Symmetries, either intact or broken, have proved to be at the heart of how matter interacts. The Standard Model of fundamental interactions (SM) is composed of three independent continuous symmetry groups denoted strong force, weak isospin and hypercharge

1.1. Neutral meson mixing

We can go a long way with an effective Hamiltonian approach in canonical single-particle quantum mechanics. To do this we construct a wavefunction from a combination of a generic neutral meson state

Appendix A.

Transfer factors

Appendixes (or should that be “appendices”?) make you look really clever, ‘cos it’s like you had more clever stuff to say than could be fitted into the main bit of your thesis. Yeah. So everyone should have at least three of them. . .

A.1. Like, duh

Padding? What do you mean?

A.2. $y = \alpha x^2$

See, maths in titles automatically goes bold where it should (and check the table of contents: it *isn’t* bold there!) Check the source: nothing needs to be specified to make this work. Thanks to Donald Arsenau for the teeny hack that makes this work.

Appendix B.

Systematics

Hi.

Bibliography

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