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AtlasTitle: Bare bones ATLAS document

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This is a bare bones ATLAS document. Put the abstract for the document here.

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Contents

Acronyms and abbreviations

LHC Large Hadron Collider
CERN Conseil Européen pour la Recherche Nucléaire
SM Standard Model
ATLAS A Toroidal LHC Apparatus
CMS Compact Muon Solenoid
BSM Beyond Standard Model
EWSB Electroweak Symmetry Breaking
CKM Cabbibo-Kobayashi-Maskawa
Vector Boson Fusion VBF
SR Signal Region
CR Control Region
ML Machine Learning
MVA Multivariate analysis
MC Monte Carlo
BDT Boosted decision tree
TMVA Toolkit for Multivariate Analysis
ROC Receiver Operating Characteristic
AUC Area under the curve
LHCb LHC-beauty
ALICE A Large Ion Collider Experiment
ID Inner detector
IP Interaction point
IBL Insertable B-Layer
SCT Semiconducting tracker
RNN Recurrent Neural Network
QCD Quantum Chromodynamics
NLO Next-to-leading-order
NLO Next-to-next-to-leading-order
MMC Missing-mass calculator
NF Normalization factor
POI Parameter of interest
NP Nuisance parameter

Preface

Here it should be written the preface of this document.

Chapter 1

Introduction to Standard Model and Higgs Boson Physics

The present chapter describes the theoretical frame needed to understand and motivate the physical contents of this thesis. It firstly introduces the Standard Model of particle physics, a theory that describes the foundations that rule the subatomic world.

1.1 The Standard Model of Particle Physics

1.2 Electroweak interaction and spontaneous symmetry breaking

1.3 The Higgs boson and its role in the Standard Model

1.4 The 125 GeV Higgs boson at the LHC: production mechanisms and decay channels

1.5 Beyond the Standard Model and the importance of Higgs boson precision measurements

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2.2.3 Calorimeters

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2.2.3.2 LAr hadronic calorimeters

2.2.3.3 Tile hadronic calorimeter

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2.2.7 Trigger and Data Acquisition system

2.2.8 The LHC computer grid

Chapter 3

Results

Place your results here.

Chapter 4

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Place your conclusion here.

Bibliography

[1] ATLAS Collaboration,
The ATLAS Experiment at the CERN Large Hadron Collider,
JINST **3** (2008) S08003.

Appendix

In a paper, an appendix is used for technical details that would otherwise disturb the flow of the paper.

Acknowledgements

The `atlaslatex` package contains the acknowledgements that were valid at the time of the release you are using. These can be found in the `acknowledgements` subdirectory. When your ATLAS paper or PUB/CONF note is ready to be published, download the latest set of acknowledgements from:
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