

Diploma thesis

Introduction

Aim of this thesis. Prediction $w+\text{jet}$ and $t\bar{t}b\bar{a}$ events with lost muons and electrons in very high energetic regions.

Chapter

1. Definition of values (search variables) ((position variable))
2. Theory
 1. Standard model
 2. SUSY
3. Detector
 1. Overview
 2. Parts
 1. Tracker
 2. Ecal
 3. Hcal
 4. Muon Chambers
 5. Trigger
4. Analysis
 1. Idea of Lost lepton concept
 2. Selection of events
 3. Prediction (HT MHT)
 1. Controlsample
 2. Efficiencies
 1. acceptance
 2. reconstructed
 3. tag and probe iso
 3. Signal Contamination
 4. Modeling the background
 1. iso
 2. reconstructed
 3. acceptance
 5. Uncertainties
 1. PDF uncertainties
 6. Other SM backgrounds
 7. Influence of higher pileup
 8. Closuretest
 9. prediction on data
5. Applying the prediction to Susy searches with jets and missing energy
6. Conclusion and outlook