

Measurement of CP Violation in $B^\pm \rightarrow \pi^\pm \pi^+ \pi^-$ Decay Channal at Large Hadron Collider

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Abstract: A set of selected data samples which were collected by LHCb[1] in 2011 are studied. Contained $B^\pm \rightarrow \pi^\pm \pi^+ \pi^-$ decays in magnet “up” and “down” polarity are constructed. Global CP asymmetry in this channel is measured to be $A_{CP} = 0.135 \pm 0.023 \pm 0.010$, in which the first and second uncertainties are statistical and systematical respectively.

1 Introduction

[illegible]

2 Theory

[illegible][illegible]

3 Results

[illegible]

[illegible]

4 Conclusions

[illegible]

- [1] A. A. Alves Jr. et al. The lhcb detector at the lhcb., *JINST* 3 (2008) S08005.