LHC Electroweak Working Group recomendations on reporting results on anomalous gauge couplings

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Abstract

The LHC Electroweak Working Group presents recomendations on reporting studies of anomalous gauge couplings. These recommendations will allow for better comparisons between experiments and for combinations of ATLAS and CMS results. Etc

INTRODUCTION

This document details the recomendations of the LHC Electroweak Working Group, which is composed of experimentalists from the ATLAS and CMS experiments as well as theorists who are studying anomalous couplings at the LHC. Studies of anomalous couplings began in the LEP era [1–10] and continued at the Tevatron [Citation needed] and the LHC [Citation needed]. Over this time significant progress has been made in the theoretical understanding of anomalous gauge couplings. With the LHC now running near its maximum center of mass energy and collecting significant integrated luminosity we are entering the era of legacy LHC measurements. The LHC Electroweak working group aims to update the community on recent theorectial developments towards developing a unified approach towards anomalous couplings between the LHC experiments. This will facilitate comparisons between experiments and allow for combinations to further improve our understanding of anomalous couplings.

In this document we first present the recommendations of the LHC elecroweak working group in Section . Etc

OUTLINE OF RECOMENDATIONS

OVERVIEW OF THEORETICAL METHODS

Test cite [11].

EFFECTIVE FIELD THEORY OF ANOMALOUS COUPLINGS

VALIDITY OF THE EFFECTIVE FIELD THEORY

METHODS FOR SETTING LIMITS ON ANOMALOUS COUPLINGS

CONCLUSIONS

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