PhD thesis: List of corrections

Thomas CHARMAN

“Measurements of H to b b-bar decays and VH production with the ATLAS detector at the Large Hadron Collider in proton-proton collisions at √s = 13 TeV”

1. ~~There are several typographical and grammatical errors in the thesis, these should be corrected.~~
2. ~~In Chapter 1, please add a comment about the incompleteness of the standard model here, as we know that it cannot be the final theory. You could also add strains on SM fits.~~
3. ~~In Chapter 2, please add a short comment on the non-Abelian character of QCD~~
4. ~~In Chapter 3 please add some technical information on the performance of each of the sub-detectors (ECAL, HCAL, tracker etc.) so that the reader can appreciate important aspects such as the energy and momentum resolution, the missing E~~~~T~~ ~~resolution, impact parameter resolution etc. Improve the description of the SCT, in particular the polysilicon resistors and the stereo angle.~~
5. ~~In Chapter 4. It would be appropriate to quote the general form of the Gini index in equation 4.2. We would like you to add a paragraph on the possibility of using a neural network in your analysis.~~
6. ~~In Chapter 6 figure 6.1 has a colour scale which should be explained. Please add a comment on how the selection criteria have been chosen or optimised. In section 6.3 please explain why a 50/50 split of the data into training and validation was used. Was a k-fold approach to the train/validate data sets considered?~~
7. ~~In Chapter 7, section 2.1, please give a brief description how the combined luminosity uncertainty is calculated. Ref [120] does not combine different years.~~
8. ~~In Chapter 8 a brief mention of relevant CMS observations of the process discussed in this thesis should be added.~~
9. Bibliography
   1. Some references are incomplete (give a URL or DOI); for example [54], [56], [63], [67], [68], [115], [118], [162]
   2. Some, important, references are unavailable to any reader who is not a current member of the ATLAS collaboration:   
      [72],   
      [91],   
      [92],   
      [93],   
      [95],   
      [98],   
      [99],   
      [110],   
      [124].  
      Where these are first references in the text please add one or two sentences so that the non-ATLAS reader can understand why they are being quoted (i.e. what is the relevance of the reference to the point being made in the text)