Hepdata: The ATLAS perspective

Bill Murray STFC-RAL / University of Warwick bill.murray@stfc.ac.uk 12th November 2014

What works well?What could be better?

HepData

- ATLAS is a big user
 - Exp ATLAS yields 164 entries, c/f CMS 85
- The reaction search ("p p --> Z + X") is a very useful
 - But especially so for SM results
 - Harder to use for new physics searches



Data entry

Input has been not totally trivial

- There seems to be an error report per month
- This is typically theorists trying to reproduce our results
 Especially SUSY searches
- Thanks to those that catch them, but clearly minimising these is important.
- Flexibility for occasional 'special' requests is important and should be retained.

SM measurements

- Overall happy with the way Hepdata works
- New data upload was just introduced
 - SM conveners assign paper to analyser; analyser does upload.
 - Maybe we miss a 'check' step here ATLAS issue!
 - The test upload functionality is there and we should formalise our use of it.
 - First paper uploaded on Friday 7th
 - No detailed report yet
 - But looks OK at first sight.



Searches

- At the previous (June/July) meeting, the ability to upload in ROOT format was discussed.
 - Some people are quite enthusiastic
 - But some caution about this, because the text files usually need a lot of editing before they're fully ready, i.e. it's difficult to get a ROOT file into a state where it can be converted completely automatically to the final output.
 - But this is personal opinion,
 - Does the HepData team have a more concrete proposal
 - And does it address this issue?
- The ability to test before upload is a must
- Does the limitation of the search query reduce hepdatas usefulness as a way for theorists to find data?
 - Is there anything we can do better?
 - The issue of signatures v models is important here