

HepData Advisory Board Meeting

CMS experience and suggestions

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Usage of HepData in CMS

- CMS Collaboration Board decision to upload all analysis results to HepData
- Not yet strictly enforced but all Run2 publications should be appear in HepData
 - likely not possible to do this for past publications
 - authors have moved on, not all info in numerical form available, etc.
- Usage is picking up
 - currently 135 publications added (31%)
 - compared to 86 publications last year (25%)
 - still mainly SM measurements such as cross-sections, less used by searches (with exception of B2G)

Practical Arrangements

- Upload is overseen by the physics analysis groups
 - administrators are either conveners or people they nominate
 - administrator / encoder system is working ok
 - one admin account per physics analysis group
 - B2G, BPH, EXO,FSQ, GEN,HIG,HIN,SMP,SUS,TOP
 - cms-phys-top-hepdata@cern.ch

Experience with administrator / encoder system

- seems to work well but still a fair amount of manual preparation needed to convert plots/tables to correct input format and adding meta data
 - test page for verification is a good feature!
 - alternative data formats?
 - root histograms? tables in csv?
- Ideally would standardize this to make it easy for authors
 - no standard format within CMS – apart from using ROOT
- Interplay with RIVET?
 - many analysis in RIVET
 - integration with INSPIRE?

Practical Questions for Discussion (from last year)

- What data/information to upload
 - all plots/tables in publication
 - info from all histograms in a plot?
- How to include searches/limits? Standardized format?
 - 1D, 2D etc., observed, expected,..., exp and theo uncertainties
 - also include theory predictions for reproducibility?
 - agree on a Standard for searches?
- What about “additional material” not in original publication
 - such as, e.g., efficiency maps needed for interpretations
 - how to cite this? (won't be linked from Journal)
- Desired functionality
 - version numbering/history
 - Output format - histograms in .root files?