

HepData Advisory Board kickoff meeting - CMS experience and suggestions

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Usage of HepData in CMS

- CMS is supportive of uploading analysis results to HepData
 - part of CMS publication policy
- Current usage not as widespread as desired
 - around 25% of CMS publications uploaded to HepData (86 publications)
 - mainly SM measurements such as cross-sections, less used by searches
 - physics analysis groups handle it by themselves
 - often up to authors
- CMS plans to include all future publications in HepData
 - plans to handle submission uniformly and enforce in future
- Discussing possibility to add past publications
 - difficulties to resurrect all required information numerical form
 - time consuming

Experience with new submission procedure

- Administrator/Encoder system tested by Standard Model and Beyond 2 Generation groups
- 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?
- Aim to standardize this to make it easy for authors
 - also some homework to be done by CMS

Practical Questions

- 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)

Functionality

- Desired functionality
 - version numbering/history
- Recent improvements
 - prevent duplicate entries
 - paper title picked up from INSPIRE and included in system emails (also linked to INSPIRE record)
- Output format
 - histograms in .root files?
- Will continue to provide feedback as we use the service