Automation of creation of public material: progress report

Frank Filthaut (Radboud University and Nikhef, Nijmegen, NL)



Recapitulation

Discussed during January CM: import & adapt ATLAS software (all Python based) to prepare web pages featuring material (figures, tables) in publications

Two steps:

- 1. Extraction of tables, figures and corresponding captions
- 2. Integration into a web page that is to be made public
- Possibility for "embargo": restriction of visibility to DUNE

Tested on the LBL sensitivity paper



Extracting material from sources

Bottom line: essentially working

- Minor tweaking will presumably remain necessary, but this should not be demanding
 - Home-brewn code to convert LaTeX macros into html code, functional but does not do a perfect job (this is one of the reasons for wanting the "embargo" functionality)
- Figures: assumes that subfigures are all numbered (a), (b), ... not necessarily in agreement with the "left" / "right" used



Web page creation

Mostly working (test output on my laptop)

— Formatting issues: lacking css, JavaScript Long-baseline neutrino oscillation physics potential of the DUNE experiment Contact: Elizabeth Worcester Preview **Content** Figures Tables **Figures** Normal MH Figure 01a: The appearance probability at a baseline of 1300km, as a function of neutrino energy for $\delta_{CP} = -\pi/2$ (blue), 0 (red), and $\pi/2$ (green), for neutrinos (top) and antineutrinos (bottom), for normal ordering. The black line indicates the oscillation probability if θ_{13} were equal to zero. png_(133 kB)_pdf (54 kB) Neutrino Energy (GeV) 1300 km © 0.12 The appearance probability at a baseline of 1300km, as a function of neutrino energy, for $\delta_{CP} = -\pi/2$ (blue), 0 (red), and $\pi/2$ (green), for neutrinos (top) and antineutrinos (bottom), for normal ordering. The black line indicates the oscillation probability if θ_{13} were equal to zero. png (130 kB) pdf (54 kB) Neutrino Energy (GeV)



Technicalities to be sorted out

Hosting the software and having a location on the Fermilab DUNE web pages

- Authorisation & implementation of embargo to be sorted out
- Sent e-mail to Mike Kirby but no reply yet

Customising the output

- Requires css (and presumably JavaScript), will require some
 -presumably minor- code modifications to exploit these (s/w uses jinja templates; relatively easy to adapt)
- Not my specialty, and suspect that Fermilab will want to have a say in this anyway to whom can I pass this on?



Technicalities to be sorted out (cont'd)

Metadata: should add arXiv & publication information

- Can enter all of this in input CSV file, but more automation is conceivable (e.g. retrieval from docdb if available there)
- Will require some code modifications / additions in either case

Ref Code	Full Title	datetag	arXiv	email_address	email_label	DOI publication	DOI erratum
16877	Long-baseline neutrino oscillation physics potential of the DUNE experiment			etw@bnl.gov	Elizabeth Worcester		

Policy item:

- Do we want to list a contact person? If so, should that be a generic address (e.g. dune-physics-coordinators@fnal.gov) or a specific one (e.g. main paper author)?

