First H->bb Weekly Meeting

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HSG5 H->bb Weekly Meeting, 1 February 2011

News! News! News!

- News:
  - Mini acceptance challenge in HSG5:
    - Compare everyone's results given the same cuts and the same data sample: tt di-lepton MC or possibly data from given period – very useful to debug analysis machinery
  - HSG5 Workshop in Dubna
    - Likely dates have changed to 17^{th} – 19^{th} May 2011
    - Visas have to be thought about soon! Expect email with instructions for registration etc
    - **Will be the last check point for Summer CONF notes before approval process – aim to have solid results**

Chamonix!

- Chamonix workshop last week: http://indico.cern.ch/conferenceOtherViews.py?view=standard&confId=103957
- We are going to run in 2012
- Beam energy: 3.5 TeV in 2011 – think again in 2012
- Initial parameters:
  - beta* =1.5 m
  - bunch intensity 1.2×10^{11} p/bunch
  - bunch spacing 75 ns
- Increase number of bunches until ≈300
- Then clean with beam scrubbing and decide on 50/75 ns spacing
- May reach an instantaneous luminosity of $\approx 10^{33}\ cm^{-2}s^{-1}$ by mid May
- More details in today's Weekly meeting: http://indico.cern.ch/conferenceDisplay.py?confId=119623

Dear Colleagues,

CERN's Machine Advisory Committee met over the weekend and presented its conclusions to management this afternoon. I'm pleased to report that they echo those reached during the annual Chamonix workshop that was held last week, making management's choices for the upcoming LHC run simple. The main decisions we have taken are that the LHC will run through 2012 before a long shutdown, we'll keep the energy at 3.5 TeV during 2011, and we'll work hard to increase the luminosity steadily. You will find the press release CERN is issuing today with these conclusions below. There are more details in the Bulletin, and you are of course all welcome to follow the Chamonix summary talks on the afternoon of 9 February in building 222."

Best regards,
Rolf Heuer

B-tagging

- For the winter conferences (Moriond EW and later)
- Flavour Tag group we will provide calibrations for SV0 and JetProb
- Operating points:
  - SV0:
    - w > 5.85 (50% b-tagging efficiency on ttbar MC)
  - JetProb:
    - $-\log_{10}(w) > 3.25$ (50% b-tagging efficiency on ttbar MC)
    - -log10(w) > 2.05 (70% b-tagging efficiency on ttbar MC)
- Approval of calibration analyses and release of preliminary calibrations tomorrow (agenda in preparation): http://indico.cern.ch/conferenceDisplay.py?confId=110409#6
- Work ongoing advanced tag calibrations
- More info in b-tagging TWiki: https://twiki.cern.ch/twiki/bin/view/AtlasProtected/Analysis16

Jet cleaning cuts for release 16

- Jet cleaning discussion this morning – possible proposal below
- Proposal to be shown in Jet/Etmiss meeting tomorrow: http://indico.cern.ch/conferenceDisplay.py?confId=117497

	Loose	Medium = Loose or	Tight = Tight or
EM coherent noise	1)Emf>0.95 and |Q|>0.8 AND |eta|<2.8 or	1+)Emf>0.9 and |Q|>0.8 (for all eta)	12)LArQ > 0.95 15) EMF>0.98 && LArQ>0.05
HEC spike	2)HECf>0.5 && |HEC_Q|>0.5 or 4)|neg. E| >60 GeV	8)1-|HEC_Q|<HECf	
Cosmics - Beam background	5)|t|>10 ns or 6)Emf<0.05 && chf<0.05 && |eta|<2 7)Fmax>0.99 and |η|<2	9)EMf<0.05 or 10)EMf>0.95 && Chf<0.05 && |eta| < 2	13)EMf<0.1 or 14)EMf>0.9 && Chf<0.02 && |eta| < 2

From last week…

- Issues:
- Wisconsin: larger data samples for WH NN training:
  - Currently 50k events for 3 mass points
  - Private production: 150k for each mass point
  - Preselection leaves too few events for training
    - Would like 300k events for each mass point
  - Alternatives? Use truth-level? Filters?

- LMU: SVN area for code
  - Only need to know desired name, to request this (sorry for late request, mea culpa)