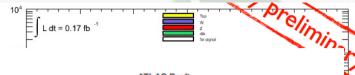
Inclusive WH/ZH, H->bb

- Paper circulation: first reading of paper went well
- Getting ready for 2nd circulation; slight delay due to SVN problem
- Combination:
 - Inputs for combination: separated WH/ZH for vvbb
- Future: many intended developments, but need time to evaluate
- MC requests: W/Z+h.f. crucial Need stats more than perfection, but clear preferences asking for large AFII Sherpa samples

Other channels:

- Boosted H->bb aim for results in Summer
 - Some improvement on inclusive sensitivity clear
 - Ongoing... progress in cut-flow comparison
 - Rumour is CMS will have for ICHEP... ☺
- ttH working for 2011 analysis in mid May
 - Ongoing... control region checks, estimating model uncertainties, Kin.fitter vs χ^2 for mass reconstruction
- Walking technicolor analysis with Exo group:
 - Preliminary results shown some sensitivity with ≈zero effort:
 - https://indico.cern.ch/conferenceDisplay.py?confld=187283
 - Waiting for MC for 1 model point to see if we have exclusion
- WZ->lvbb: use as a calibration for H->bb mass peak
 - Simple mods from existing analysis
 - Expect preliminary results this week then decide
- First look at 2012 data exploratory
 - Using PDF reweighting
 - Needed to scale down MC by 20% (lumi? Pileup? JES?)
- Other:
 - bA/H->bbb: difficult analysis, early results show masses < 300GeV hard
 - VBF H->bb: difficult analysis; investigating QCD estimate from data (TRF)
- Internal Note
 - Note started (skeleton): <u>ATL-COM-2012-416</u>
 - Will send first draft to all analyses to fill this weekend
 - Will be a "statement of intention" instead of a deep study... (no MC, no time, etc)

HSG5: H → bb



ATLAS Draft

Search for the Standard Model Higgs boson produced in association with a vector boson and decaying to a b-quark pair with the ATLAS detector

Version: 1.5

To be submitted to: Phys. Lett. B.

Corresponding editor(s)

Ricardo Gonçalo (jose.goncalo@cern.ch)
Andrew Mehta (sebta@bep.ph.liv.ac.uk)
Glacinto Piacquadio (giacinto.piacquadio@cern.ch)
Paul Thompson (pdt@bep.ph.bham.ac.uk)

A list of supporting internal notes and their authors can be found:

Supporting internal notes

ATL-COM-PHYS-2011-1648 https://odsweb.cem.ch/record/1404176/ ATL-COM-PHYS-2012-062 https://odsweb.cem.ch/record/1418230

Editorial Board

Pippa Wells (Pippa.Wells@cern.ch)
Elzbieta Richter-Was@cern.ch)
Christian Weiser (Christian.Weiser@cern.ch)
Gavin Hesketh@cern.ch)

Comments are due by: May xx, 2012

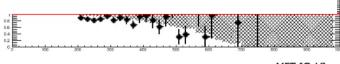
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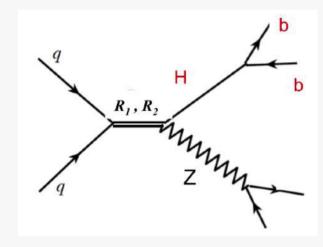
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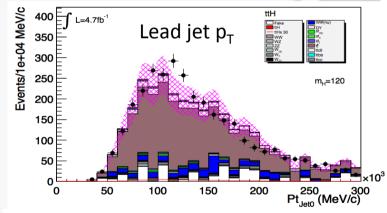
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MET [GeV]



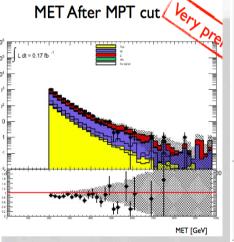
m _H	Observed	Expected μ/μ_{SM}				
(GeV)	$\mu/\mu_{ m SM}$	-2σ	-1σ	Median	$+1\sigma$	$+2\sigma$
125	1.92	0.66	0.89	1.24	1.72	2.30
140	2.02	0.81	1.09	1.51	2.10	2.82

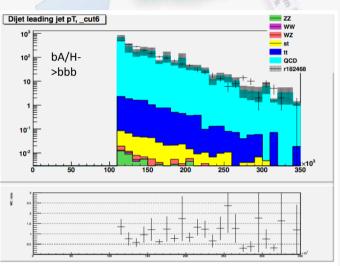


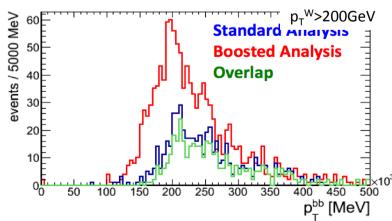
	Region	Туре
Α	= 4 jets and $= 1$ b-tag	Control
В	= 5 jets and $= 1$ b-tag	Control
С	\geq 6 jets and = 1 b-tag	Control
	\geq 6 jets and \geq 3 b-tag	Signal

L dt = 0.17 fb - 1

HSG5: H → bb







Ricardo Goncalo

Higgs subconveners meeting -