

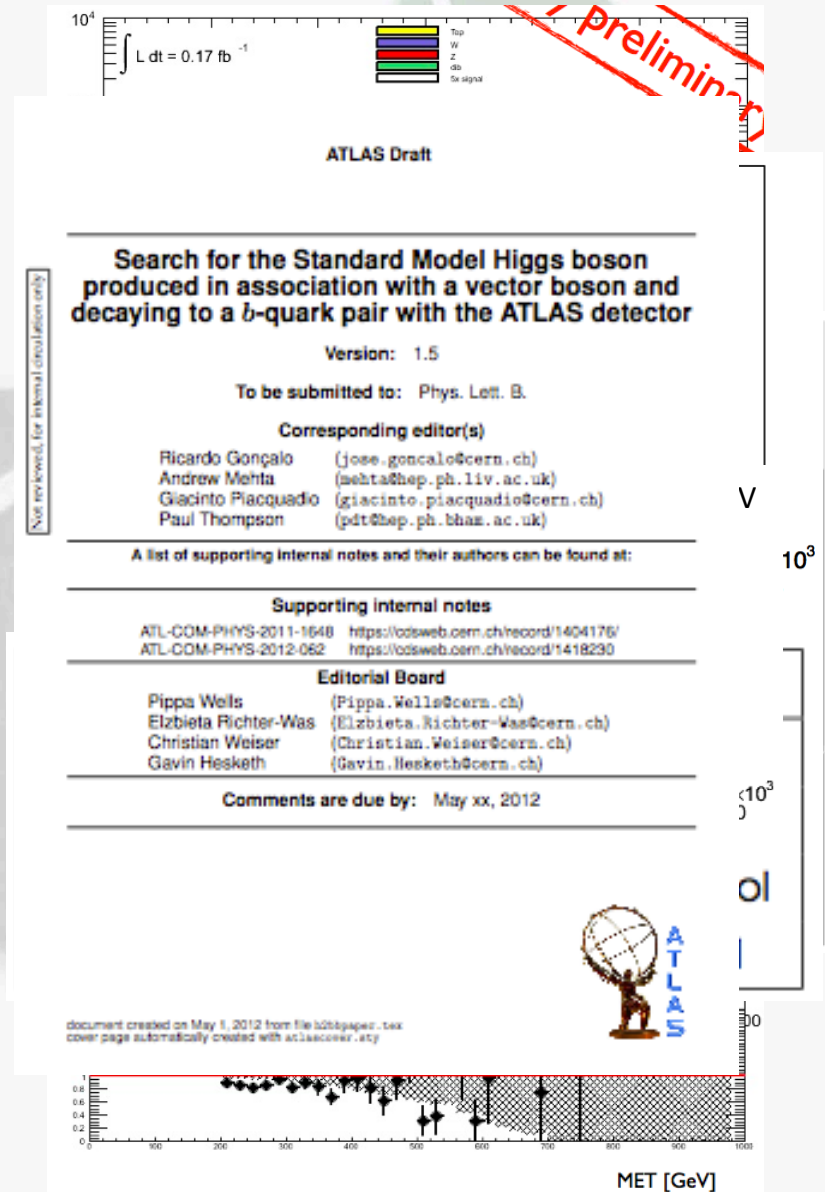
Inclusive WH/ZH, H->bb

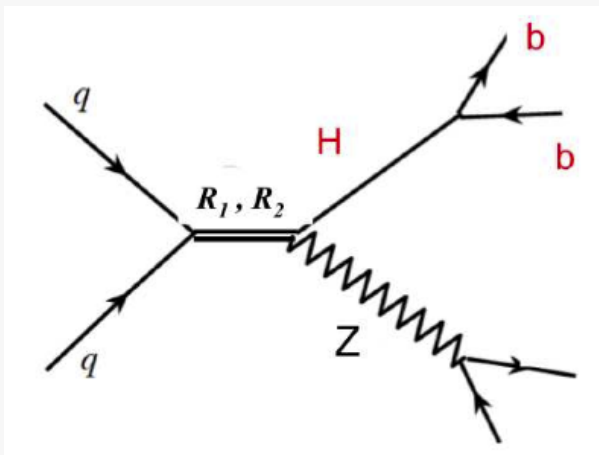
- Paper circulation: first reading of paper went well
- Getting ready for 2nd circulation; slight delay due to SVN problem
- Combination:
 - Inputs for combination: separated WH/ZH for vvbb
- Future: many intended developments, but need time to evaluate
- MC requests: W/Z+h.f. crucial – Need stats more 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 \approx zero effort:
 - <https://indico.cern.ch/conferenceDisplay.py?confid=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): [ATL-COM-2012-416](#)
 - 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)

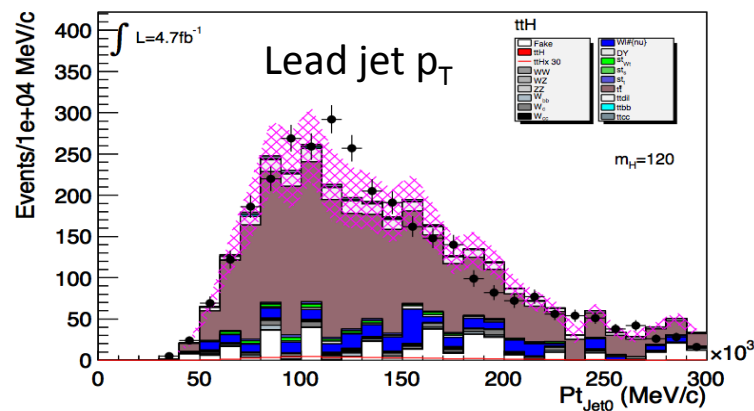
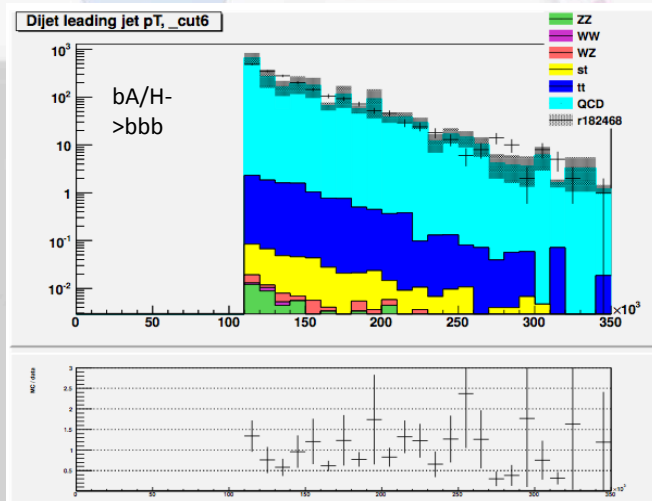
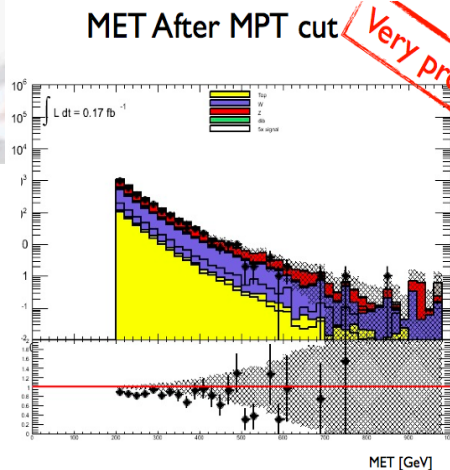
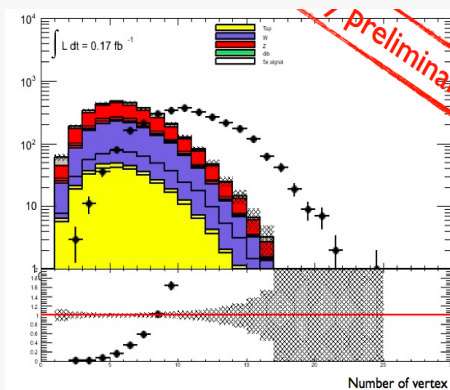
HSG5: H → bb





HSG5: $H \rightarrow bb$

m_H (GeV)	Observed μ/μ_{SM}	Expected μ/μ_{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	Type
A = 4 jets and = 1 b-tag	Control
B = 5 jets and = 1 b-tag	Control
C ≥ 6 jets and = 1 b-tag	Control
≥ 6 jets and ≥ 3 b-tag	Signal

Ricardo Goncalo

Higgs subconveners meeting -

