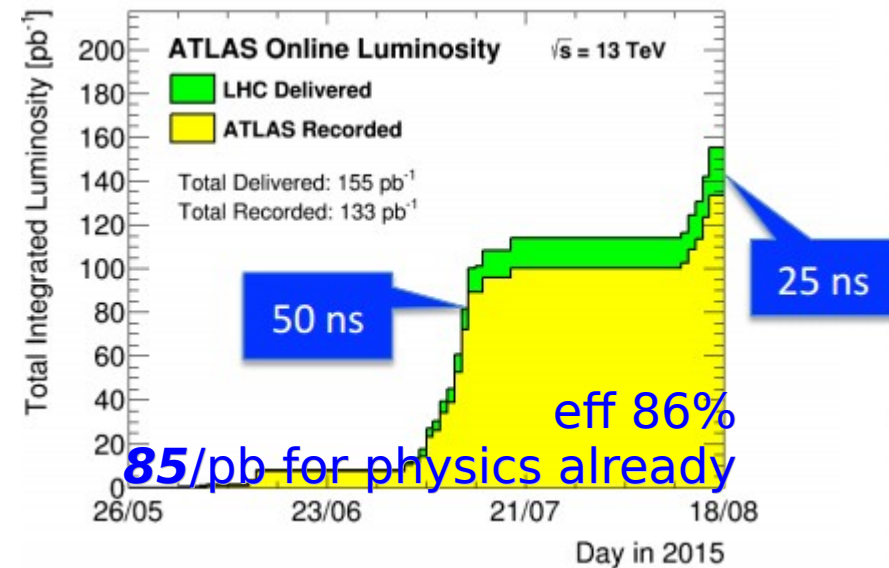


Weekly report IHEP



CDS entry

[wwyy]<https://cds.cern.ch/record/1967498>

[bbττ]<https://cds.cern.ch/record/1967500>

[combination]<https://cds.cern.ch/record/1984111/>

[paper draft]<https://cds.cern.ch/record/2008753/>

Xiaohu SUN

18-08-2015

IHEP

ATLAS weekly

<https://indico.cern.ch/event/434823/>

Open presentation

<https://indico.cern.ch/event/436601/>

Run 2 performance

Mike Lamont
Lepton
Photon
2015

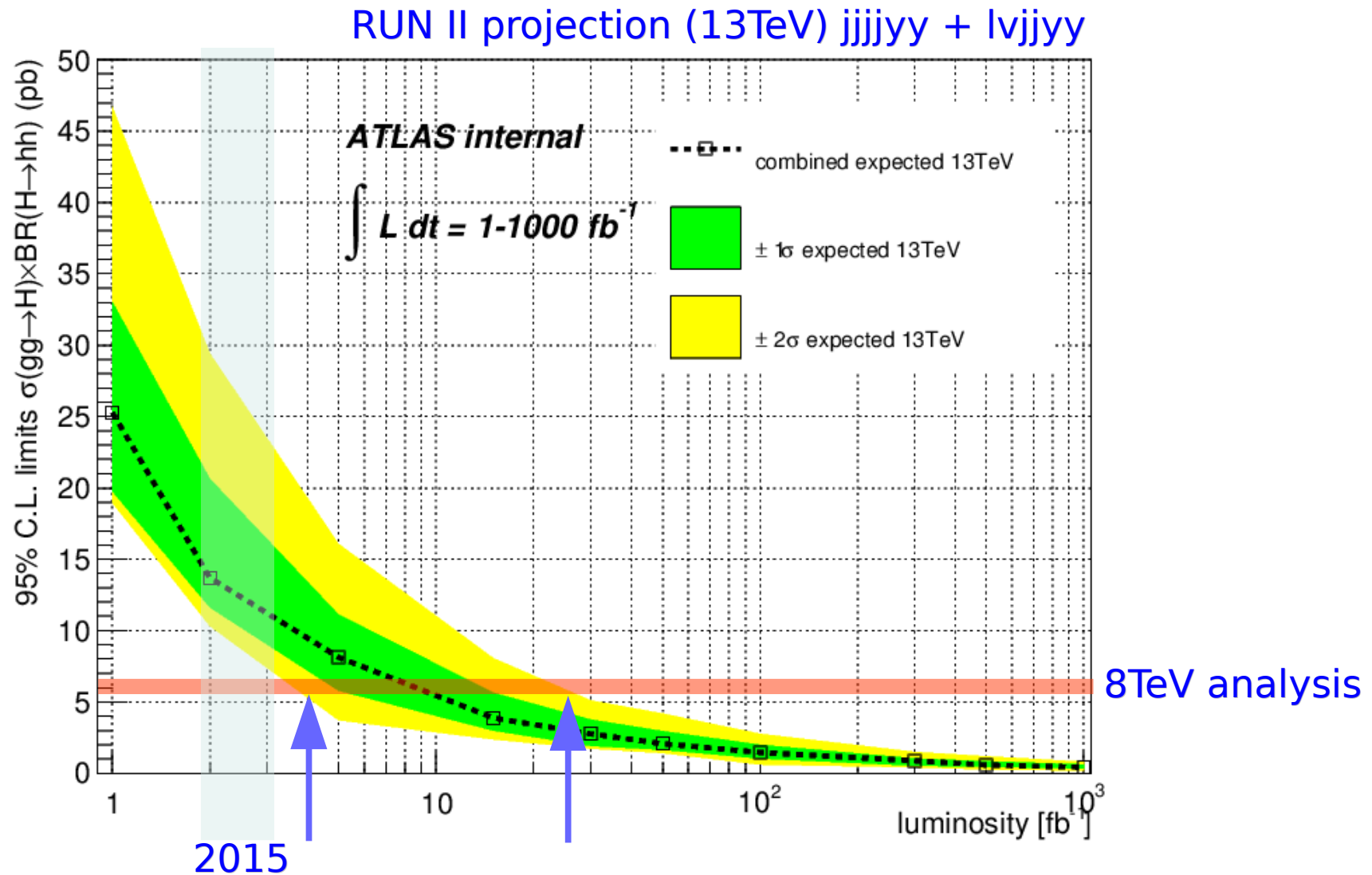
- Start 2016 in production mode
 - 6.5 TeV, machine scrubbed for 25 ns operation
 - Beta* = 40 cm in ATLAS and CMS
 - New injection protection absorbers
 - Peak lumi limited to $1.7\text{e}34$ by inner triplets
 - Reasonable availability assumed – usual caveats apply – really need to gain experience with 25 ns operation

	Peak lumi $\text{E}34 \text{ cm}^{-2}\text{s}^{-1}$	Days proton physics	Approx. int lumi [fb^{-1}]
2015	~0.5	65	3
2016	1.2	160	30
2017	1.5	160	36
2018	1.5	160	36



STATUS – A bit challenging for WWyy

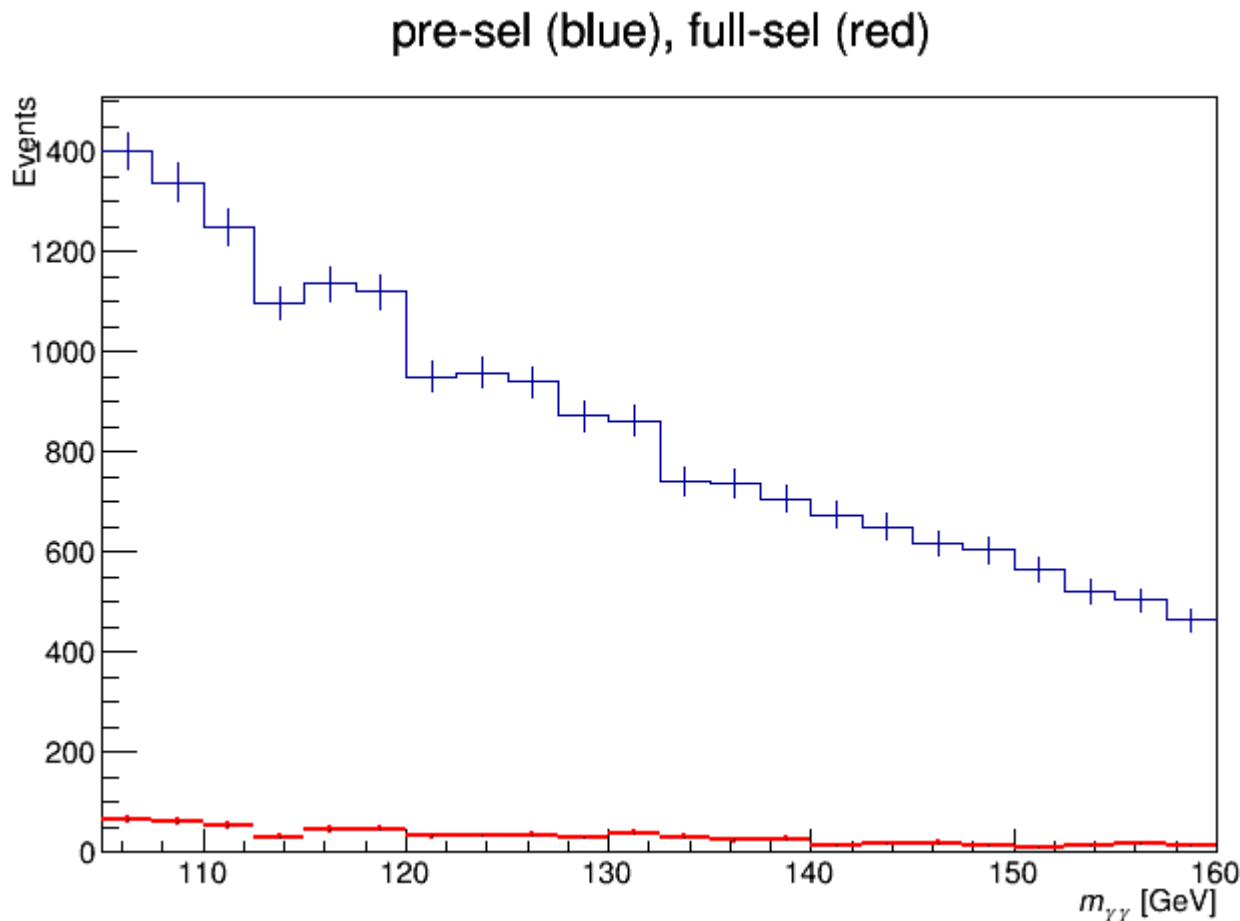
3



STATUS – RUN II wwy

4

- A first look at data for wwy



668 events by now **84.643/pb**

pre-sel

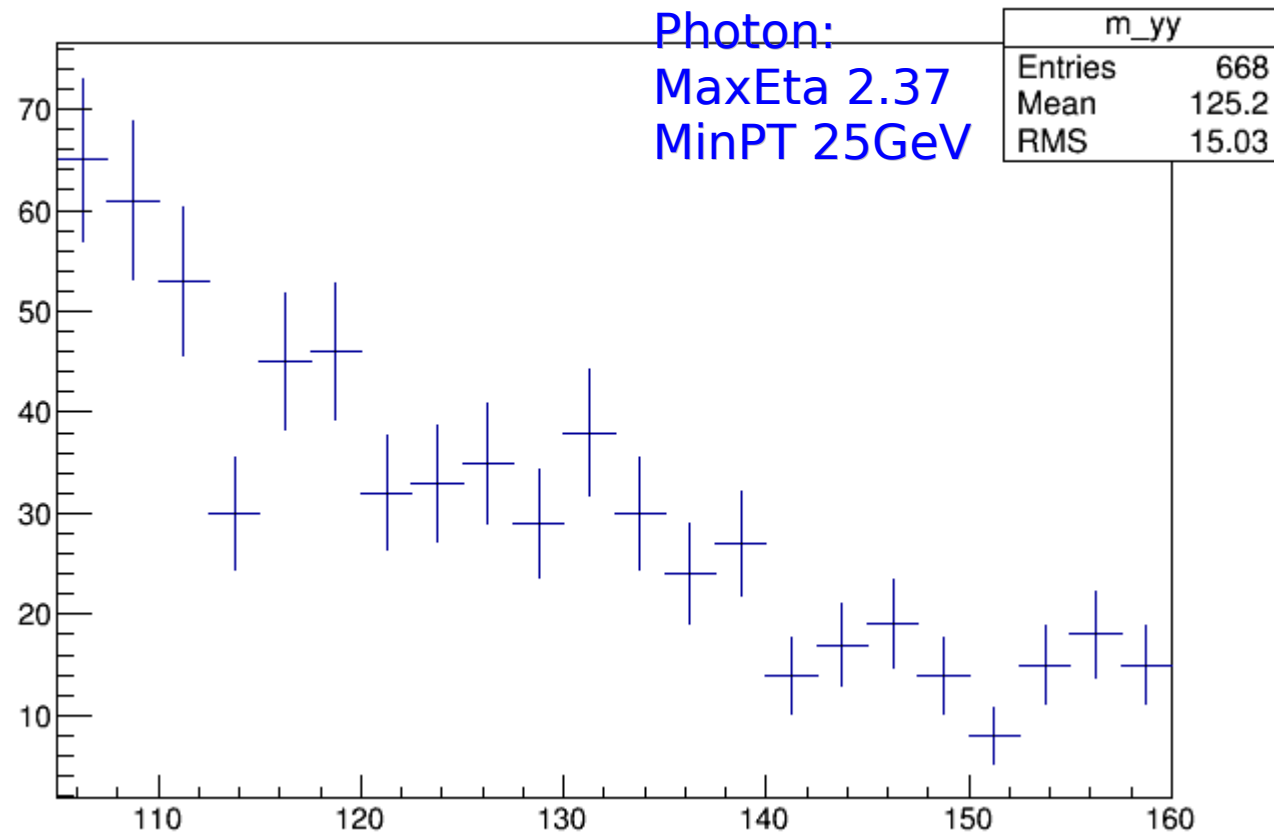
full-sel

- 1: all events
- 2: trigger
- 3: GRL
- 4: detector DQ
- 5: hasPV
- 6: 2 loose photons
- 7: e/ γ ambiguity
- 8: tight
- 9: isolation
- 10: rel ET cuts
- 11: $m_{\gamma\gamma}$ in 105-160 GeV

STATUS – RUN II wwy

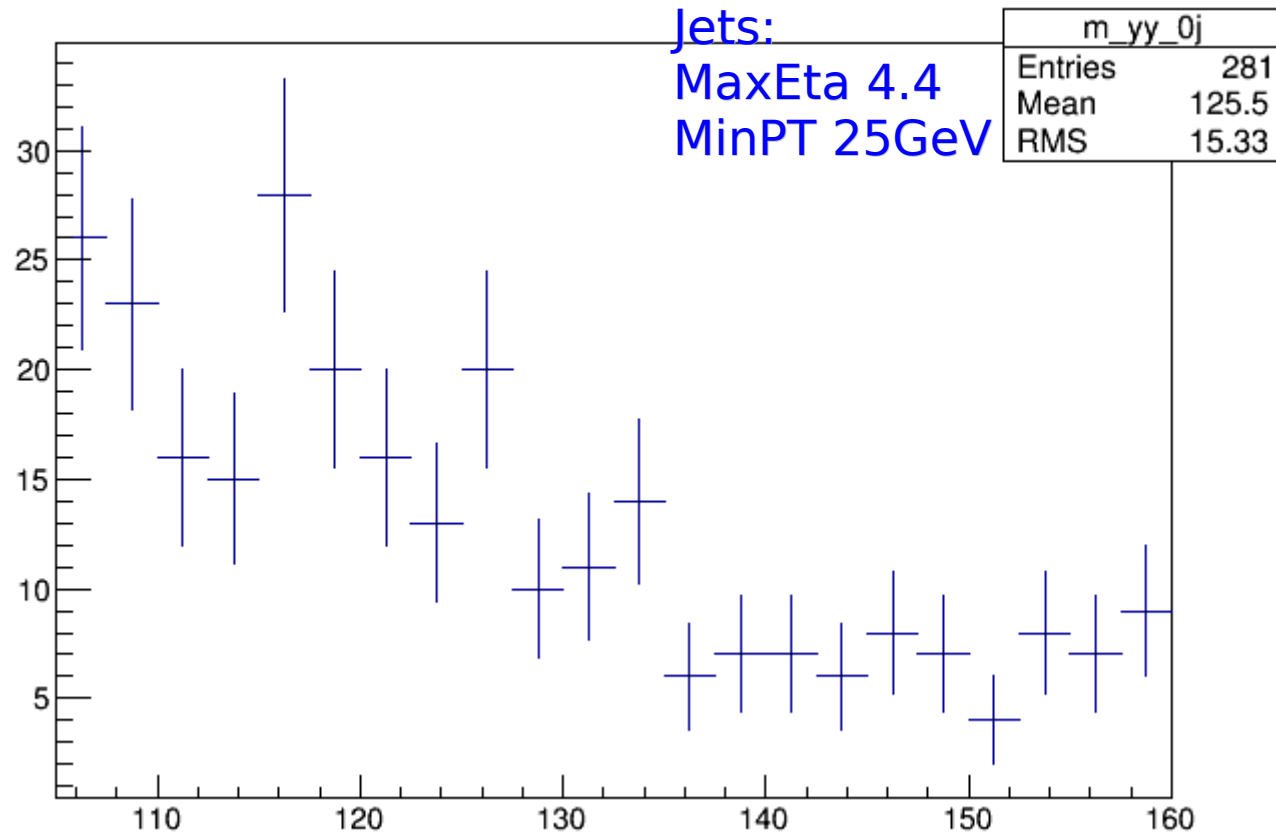
5

- Zoom in for selected yy events



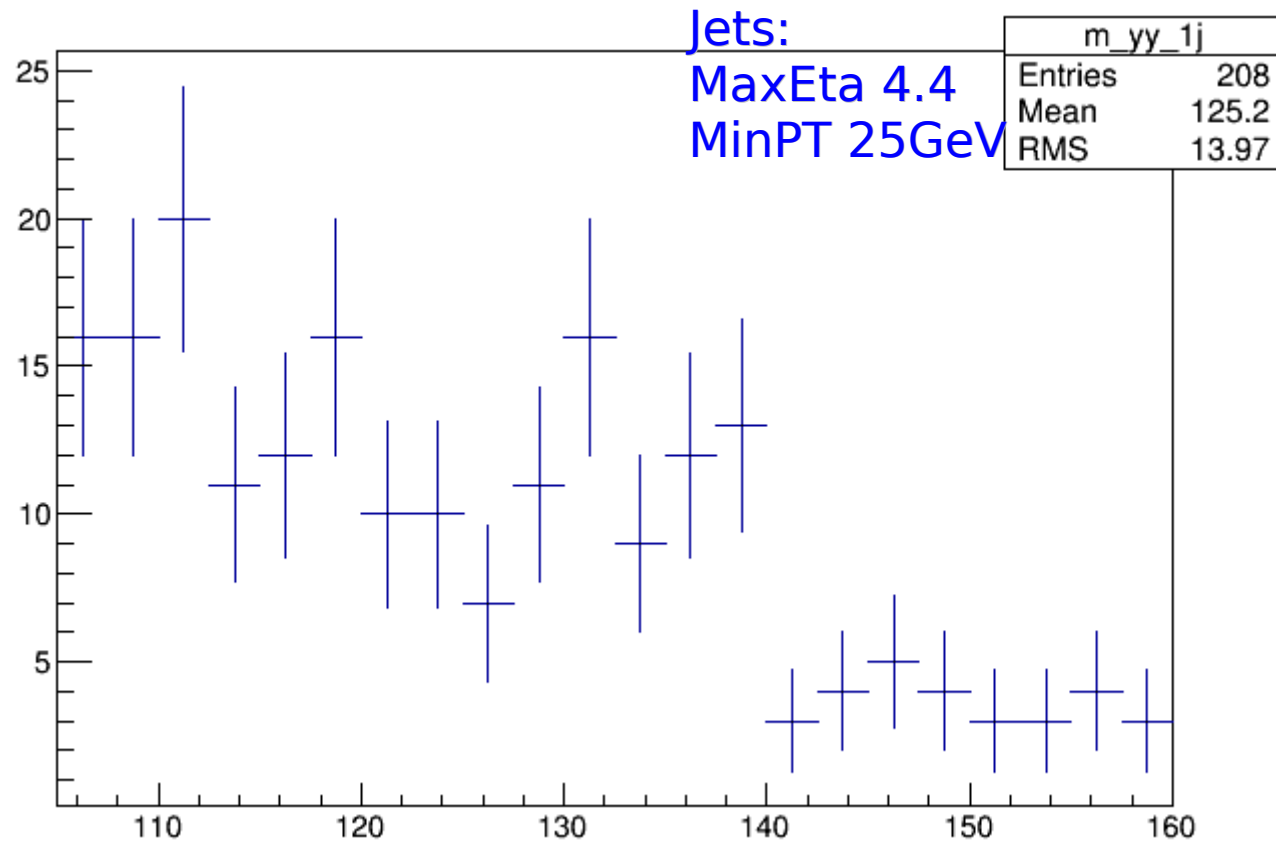
STATUS – RUN II wwy

- Zoom in for selected yy events + 0-jet exclusively



STATUS – RUN II wwy

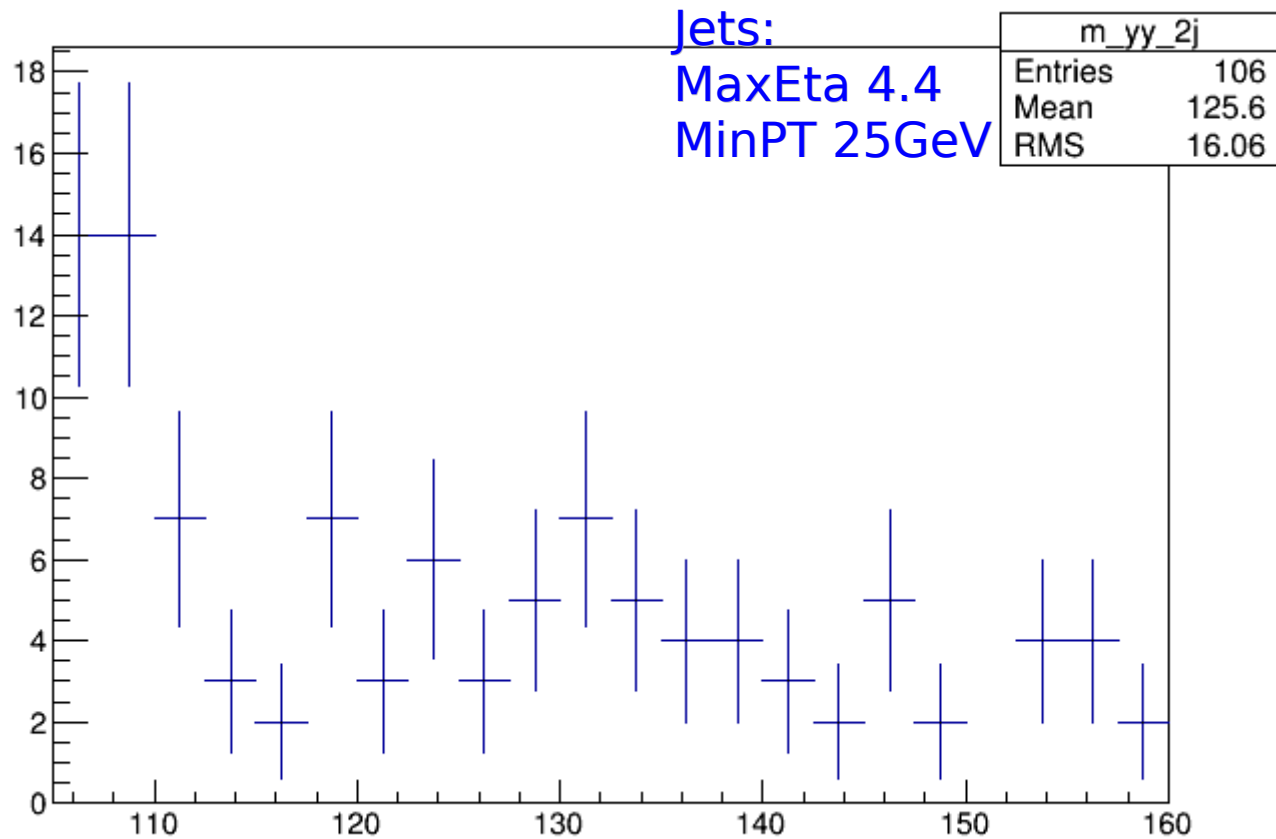
- Zoom in for selected yy events + 1-jet exclusively



STATUS – RUN II wwy

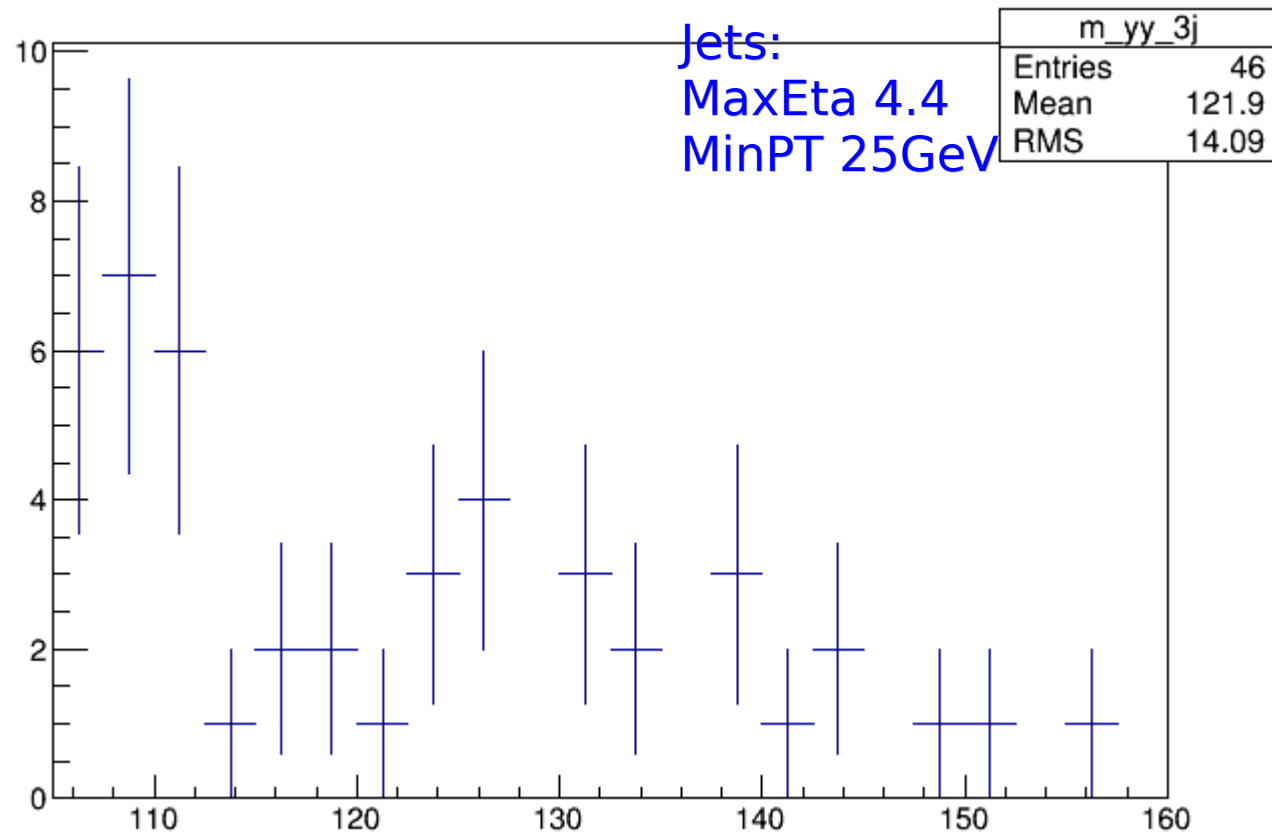
8

- Zoom in for selected yy events + 2-jet exclusively



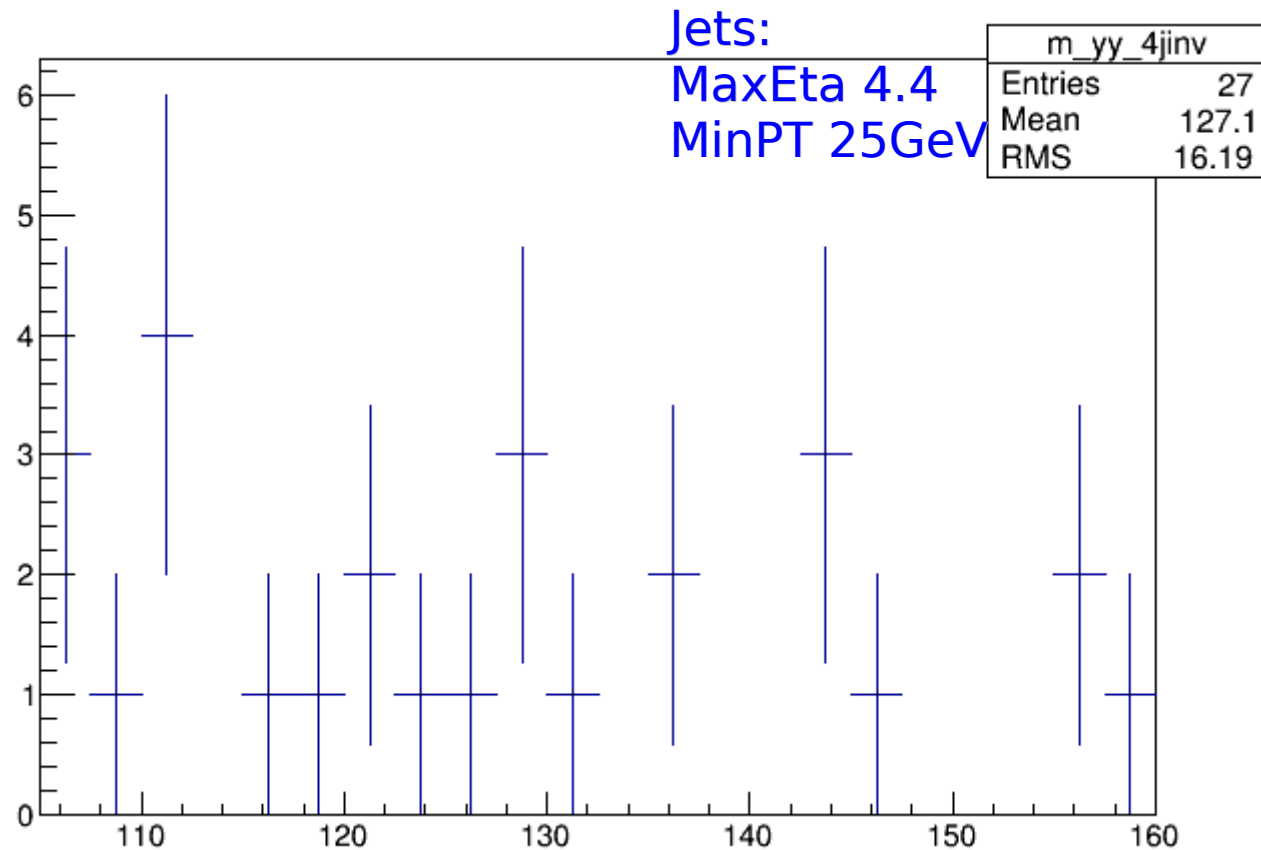
STATUS – RUN II wwy

- Zoom in for selected yy events + 3-jet exclusively



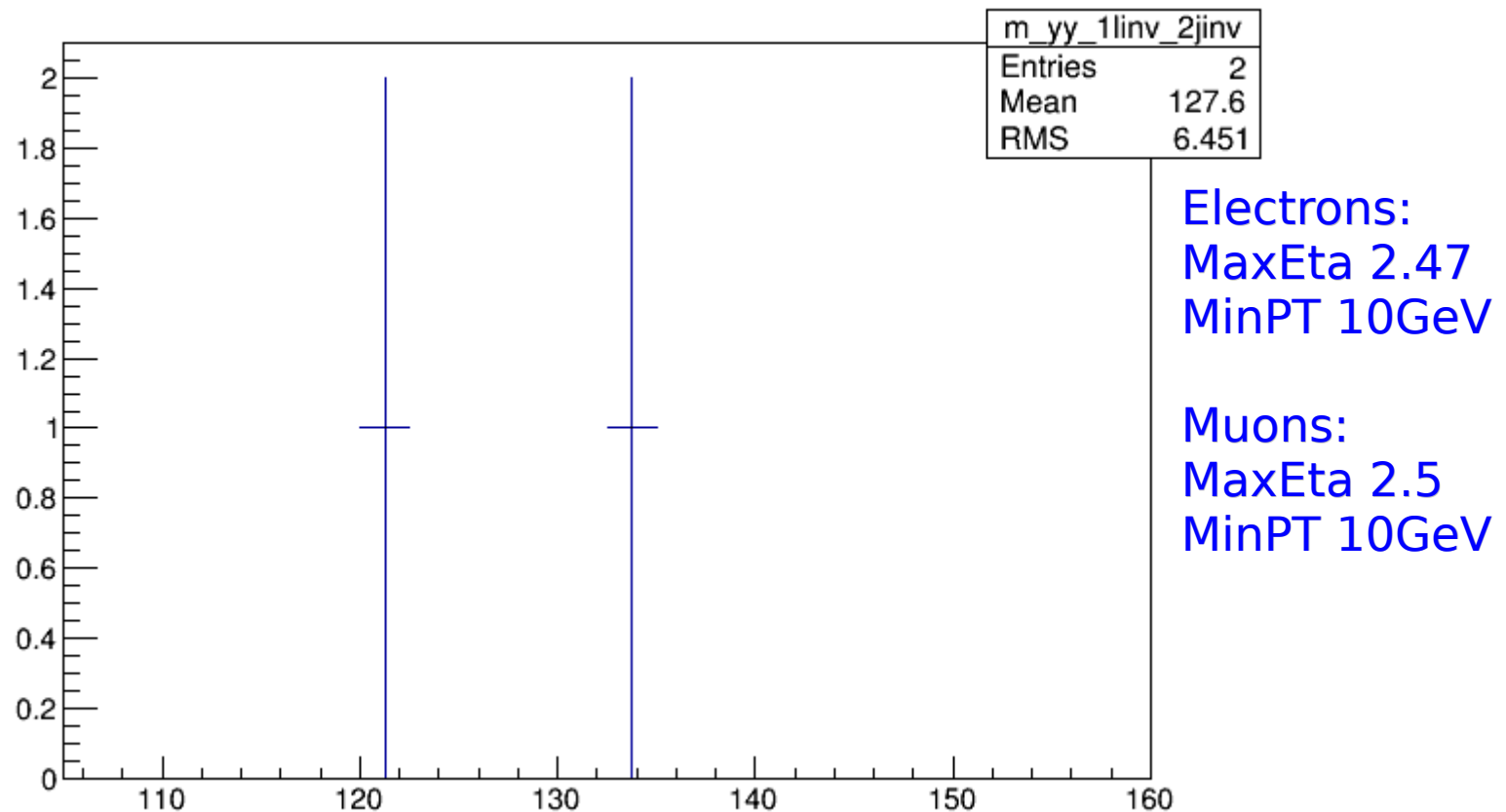
STATUS – RUN II wwy

- Zoom in for selected yy events + 4-jet inclusively



STATUS – RUN II wwy

- Zoom in for selected yy events + 1-lepton inclusively + 2-jet inclusively



STATUS – HH combination

- **CDS entry**
 - [wwyy]<https://cds.cern.ch/record/1967498>
 - [bbττ]<https://cds.cern.ch/record/1967500>
 - [combination]<https://cds.cern.ch/record/1984111/>
 - [paper draft]<https://cds.cern.ch/record/2008753/>
- ATLAS weekly <https://indico.cern.ch/event/434823/>
- OP <https://indico.cern.ch/event/436601/>
- Finished all EB's questions
- Started ATLAS 2nd circulation
- **Public reading** late this week (probably Thursday)
- Remove “Internal” in all plots now