

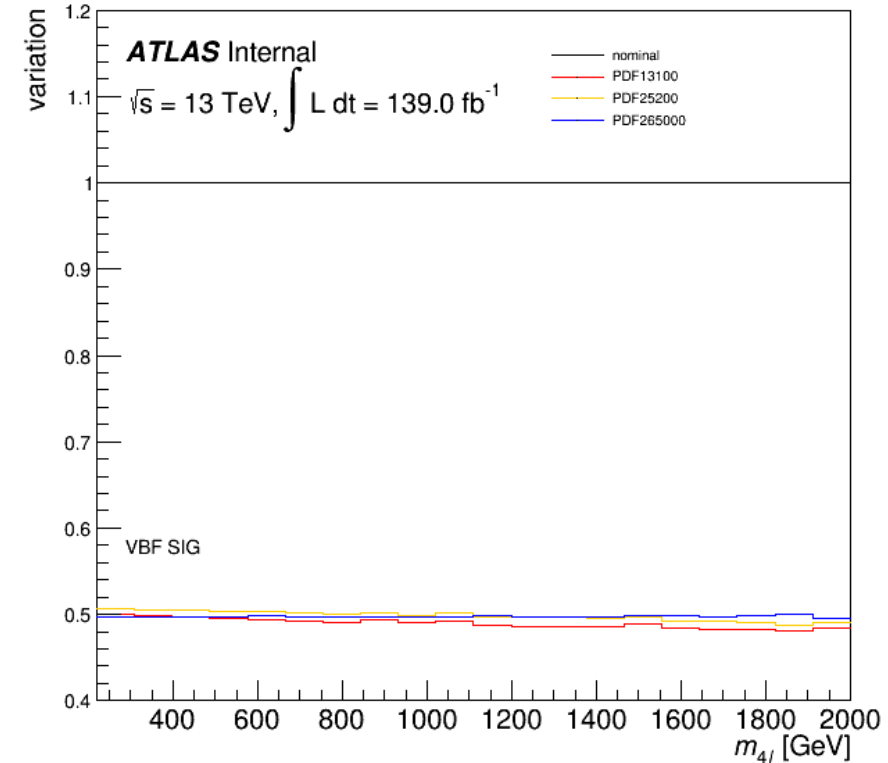
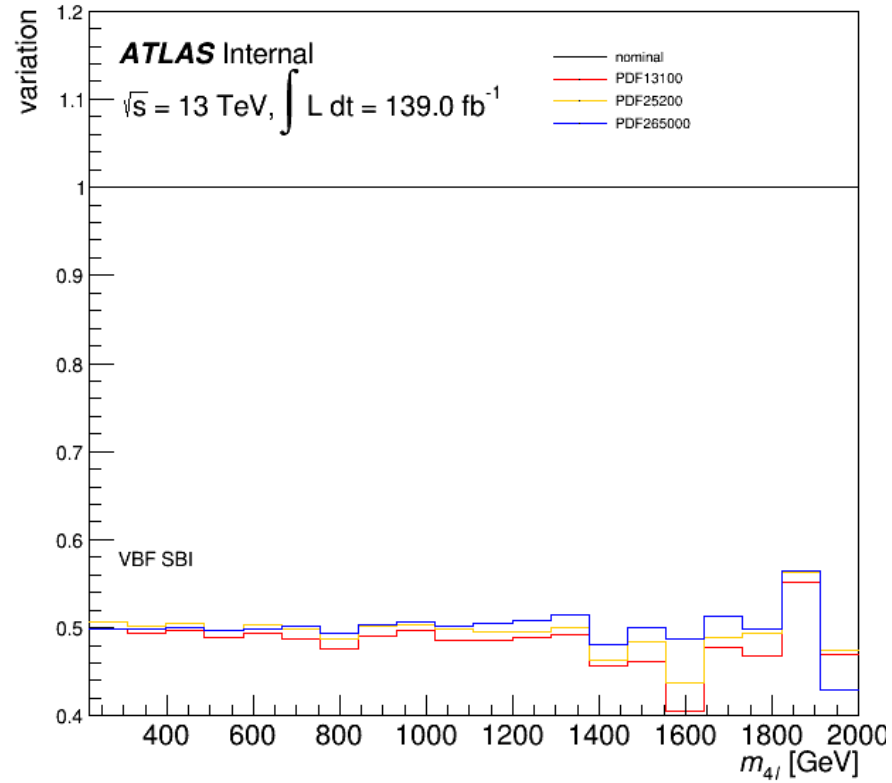
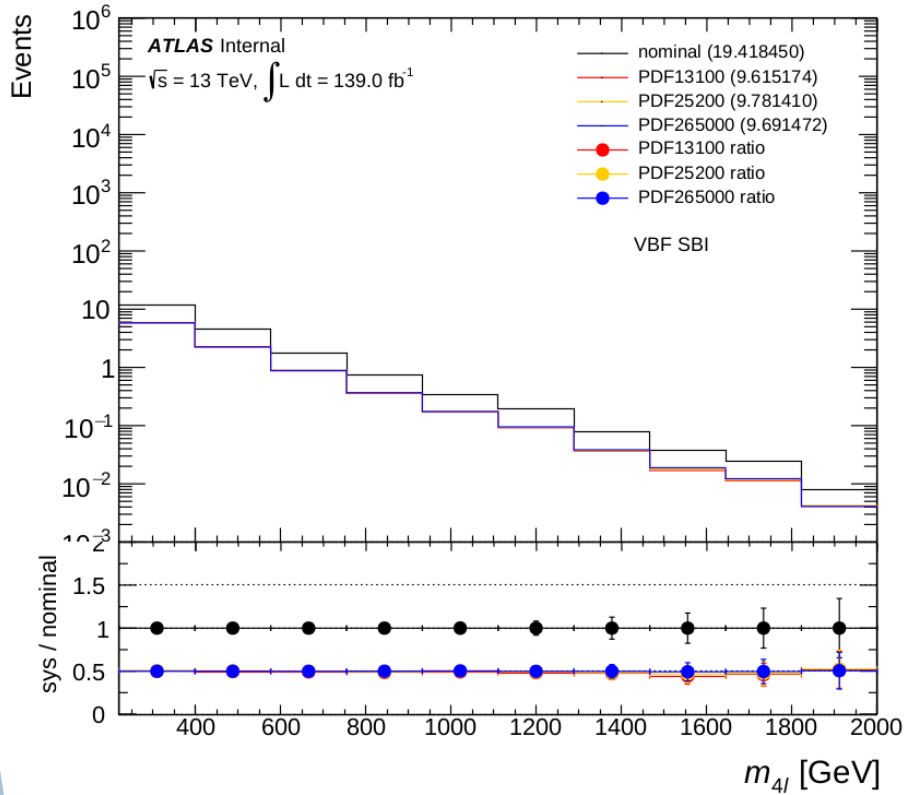
# Weekly Report

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# Problems from last week



- ▶ The ratio is always around 0.5.
- ▶ Not solved yet, probably not the problem of codes.

# Literature reading

## Supporting documentation for the off-shell Higgs signal strength measurement in $ZZ \rightarrow 4\ell$ and $ZZ \rightarrow 2\ell 2\nu$ channels

- ▶ The research ideas and significance
- ▶ The theories behind, e.g. some equations about cross sections
- ▶ Took a look at the already known results, e.g. the shape of some variables
- ▶ The methods used in systematics analysis

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# Plans for next few weeks

- ▶ Start working on a written report of literature reading. (assigned by the department)

- ▶ Preliminary selected papers:

Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC<sup>☆</sup>

**Constraints on off-shell Higgs boson production and the Higgs boson total width in  $ZZ \rightarrow 4\ell$  and  $ZZ \rightarrow 2\ell 2\nu$  final states with the ATLAS detector**

- ▶ Any advise or instructions are appreciated!
- ▶ Prepare for the mid-term exams...

Thank you! :)