## Weekly Report

**Shudong WANG** 

## **Progresses**

- IHEP ATLAS-ITk
- Submitted a response to PPB-1 readiness review, no reply yet.
- Received 8 new modules (4 LS modules & 4 SS modules at stage: HV-Tab Attached):









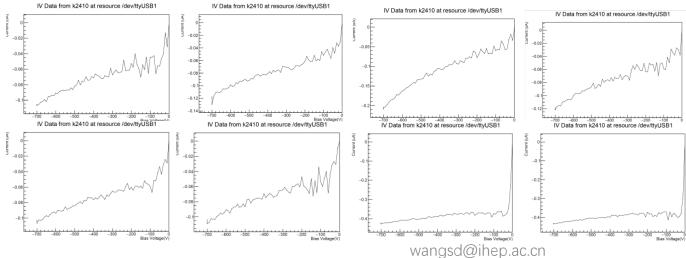








- Finished Visual Inspection (Reception) Test.
- Finished IV Test.

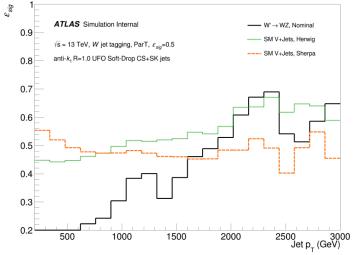


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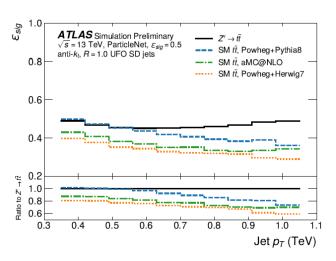
## **Progresses**

## Constituent-based W/Z tagger

- Model dependency check (sensitivity to physics modeling)
  - To estimate the dependence of tagger performance on variations in the parton shower and hadronization models (robustness against differences related to physics modeling).
  - Nominal sample:  $W' \to WZ$  with Pythia.
  - Alternative samples: V + jets with Sherpa; V + jets with Herwig.
  - Trained on the nominal sample, evaluated on the two alternative samples. The signal efficiency in each sample is measured using the threshold which results in a signal efficiency of 0.5 in the nominal sample.
  - Preliminary results:



strange, need further investigation



similar tests in top tagger study