



Research Plan

IHEP-ISU meeting



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CEPC study plans

- Start up project: measurement of W mass in $WW \rightarrow \ell \nu qq$ final state with $\sqrt{s} = 250$ GeV CEPC data.
 - recoil method to reconstruct m_{jj} .
 - To understand what the precision we can get using this method for m_W and Γ_W
 - Time scale ~ 3 -4 months with preliminary results and well prepared document.
 - Just start, based on current example code.
- Possible longer term projects:
 - Continue W boson mass measurement, to include more channels (hadronic channel)? depend on the results we have from step 1.
 - flavor tagging, more ideals?
 - More EW physics in Z pole.

ATLAS study plan

- Current highly involved analysis: SMZZ analysis -> plan to be finished by EPS (July), occupy 0.1-0.2 FTE
→ Statistical analysis
- Possible new ATLAS projects:
 - $\text{VBF}(H \rightarrow b\bar{b}) + \gamma$ (currently lead by Zhijun for this year publication.)
Preparing for 2019 publication
 - $\text{VH}(H \rightarrow b\bar{b})$ ISU involved in. Preparing for 2019 publication.
 - Related projects: high mass analysis, invisible Higgs (hadronic channel).
 - Boosted analysis: some studies was done by Jie. Possible update and studies for 2019 publication.
 - Btagging performance studies. New ideas?
 - Boson tagging.