

Achievement report of Dispatching Researchers Abroad Program in 2023

Name (Affiliation / Job title)	Shiwen An (The Graduate University for Advanced Studies, SOKENDAI/ Ph.D Student)
Email	

(1) Researcher exchange program (2) Dispatching young researchers abroad program (○ for either)	Research reference number :
Purpose	
Country /institute/schedule	Switzerland, CERN

Research achievement (including publication list) :

1. The Huge Advance in $HH \rightarrow b\bar{b}\tau\tau$ Analysis. Update the Acceptance x Efficiency Studies using truth m_{HH} in di-Higgs Sample. The result will be regulated and added to the appendix of the paper.
2. The Verification of Diboson Samples and its BDT score. Found the cross-section normalized the overall cross section is problematic. Verify the strategic difference between Sherpa2.2.1 version of the sample and Sherpa2.2.11 version of the sample. Will soon wrap up the uncertainty and update the numbers for final fitting.
3. Reports to Pixel Group with $Z \rightarrow \tau\tau$ analysis on latest Run3 dataset.
4. Monitoring and loading the New HLT-trigger to delayed stream. The study during 2022 November is well-recognized and the proposed trigger is online in the delayed stream. Currently the trigger is in good shape and the result update with data will be checked.

The Registration of the JPS Meeting in Fall, 2023 at Tohoku University will soon get started. Participation will be in person and will give first hand result.

Photo (Visiting the ATLAS Experiment):

