



Report from Physics Coordinators

Keisuke Fujii
on behalf of the Physics WG
April 8, 2020

ILD Physics WG Activities

Benchmark Analyses

- *Extra Higgs: converging content-wise*
- tt/bb: new draft prepared for next iteration*
- H → invisible: circulation period ended*
- H → bb/cc/gg: Frank's comments to be addressed*

Others: done

- *Keep communicating with reviewers and finalize analysis notes if you haven't. Don't forget to **update GitHub and Confluence pages:***

<https://confluence.desy.de/pages/viewpage.action?pageId=89671192>

Today (March 25)

- *Shogo on kinematic fit*
- *Uli on H → WW* → udcs*

Benchmark Analyses

- *Extra Higgs: new version being prepared*
tt/bb: new draft prepared for next iteration
H→ invisible: done!
H→ bb/cc/gg: Frank's comments addressed, waiting for his answer
Others: done
- *Keep communicating with reviewers and finalize analysis notes if you haven't. Don't forget to update GitHub and Confluence pages:*

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Today (March 25)

- *Validation of 250 GeV test samples:*
Uli on dE/dx, Daniel on photon calibration,
Yasser on track refitting, Remi on muon

Conferences

ICHEP 2020 (physics)

From ILD

- Heavy quark production in high energy electron positron collisions
- Improving Electroweak Precision Observables Including m_w , Γ_w , A_{LR} and TGCs with the ILD Detector
- ILC as a SUSY discovery and precision instrument

From LCC Physics WG

- Expectations for Precision Tests of the Standard Model at the ILC
- Polarized Beams at Future e+e- Colliders
- Precision Higgs physics at the ILC, and its impact on detector design

All accepted as oral presentations!

Papers

Update on ILD Papers

- ***Higgsinos : accepted for publication in PRD! Proofs checked and comments fed back to the publisher***
- ***$H \rightarrow \mu^+\mu^-$: Shin-ichi : 2nd draft submitted to ILD referees (Filip & Ivanka)***
- ***WIMPs : Moritz : accepted for publication in PRD!***
- ...

Proposed S&A meeting schedule

Apr. 8: Jenny

Apr. 22: Frank (TBC)

May 6: ? Daniel (TBC) (so called Golden Week in Japan)

May. 20: ? KF (holiday-heavy week in Europe)

...

Biweekly S&A meeting on Wednesday at 14:00 CERN time.

Physics conveners' meeting every two weeks on Wednesday at 14:00 CERN time interleaved with S&A meetings.

Conveners' ML:

ild-physics-conveners@desy.de

Use this mailing list to send your talk request.

Stay healthy!