



Report from Physics Coordinators

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on behalf of the Physics WG
May 20, 2020

ILC Situation in Japan

Current Status

- *Because of COVID19, it is not an appropriate time to bring up a big scientific project like ILC.*
- *However, the political environment about ILC is now very good.*
- *The client change: The first stage of the ILC is 250 GeV but, now **studies on energy upgrade even above 1 TeV is encouraged.***
- *Emergency state has been lifted in Ibaraki prefecture and KEK is slowly starting its normal activities.*
- *Tokyo is still in emergency state but the situation is getting significantly better now. → **ILC promotion activities resuming.***
- *Various strategy discussions are on going in KEK (KEK Roadmap, IPNS RPC) and JAHEP (Future HEP Project Committee).*
- *The International Development Team to take over LCC/LCB being discussed to be installed in a timely fashion.*

LCC Physics WG
preparation for Snowmass

LCC Physics WG is now gearing up its activity towards Snowmass

- Jenny has sent our ILD collection of topics to the LCC Physics WG
- List of physics questions being prepared
- Discussion starting regarding MC samples for Snowmass studies to be opened to new comers.
 - Fast simulation based on DELPHES?, SGV?
 - Mini-/Micro-DST from full simulation data
 - ***Discussions have just started***
- ***Sign up for Snowmass Energy Frontier WGs***
 - ***see Graham's talk at the last General ILD phone meeting.***

***ILD Physics WG
Activities***

Benchmark Analyses

- **Extra Higgs: in ILC circulation until May 1**
tt/bb: new draft in ILD circulation until April 29
- H→bb/cc/gg: comments on the new draft from referees, an informal meeting with referees expected.**
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 (May 6)

- **Validation of 250 GeV test samples: Jumping on muon ID.**

Benchmark Analyses

- *Extra Higgs: done*
tt/bb: new draft working on comments from ILD
- H→bb/cc/gg: an informal meeting with referees held on May 11, a new draft (v.9) now in circulation*
Others: done
- *Remaining works on benchmark analyses almost completed, shifting to new analyses: updating list of current/planned activities on subgroup's confluence pages: visit [Physics WG Portal](#)*

Today (May 20)

- *Validation of 250 GeV test samples: Ryo on vertexing, Keita on tau*
- *Adrian on qqbar pairs at 250 GeV*
- *Evgeny on BR(H→ZZ*)*

Papers

Update on ILD Papers

- ***Higgsinos : will appear in PRD soon!***
- ***$H \rightarrow \mu^+\mu^-$: Shin-ichi : waiting for comments from ILD referees.***
- ***WIMPs : Moritz : published in PRD!***
- ***Kinetic Edge Detection Using Finite Impulse Response Filters: Madalina Chera → meeting on May 14***
- ***...***

Proposed S&A meeting schedule

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

Jun. 3: KF

Jun. 17: Frank (TBC)

Jul. 1: Jenny (TBC)

...

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!