



Report from Physics WG

Keisuke Fujii
on behalf of the Physics WG
November 28, 2018

SCJ Review

SCJ Review Committee for ILC250

1st meeting on Aug. 10 (Joint Upper&Subcommittees Mtg.)

- **ILC 250 Physics Case: KF**
- **ILC 250 Machine: Shin Michizono**
- **LCB: Tatsuya Nakada**
 - **MEXT ILC Physics WG: Takashi Nakano**
- **MEXT ILC TDR Validation WG: Hideaki Yokomizo**
- **MEXT ILC HR WG: Takashi Nakano**

2nd meeting on Aug. 21

- **PIP: Masa Yamauchi (KEK DG)**
- **MEXT ILC Organization & Management WG: Shoken Miyama**
- **MEXT Due Process for Project Prioritization : Yoshiyuki Chihara from MEXT**

3rd meeting on Aug. 29:

- **KEK's future plan and ILC: Masa Yamauchi (KEK DG)**
- **JAHEP's consensus on ILC: Hiroaki Aihara (JAHEP chair)**
- **Particle Accelerator Society of Japan and ILC: Ryoichi Hajima (PASJ chair)**

4th meeting on Sep. 11: closed

5th meeting on Sep. 18 (joint with the subcommittee): list of main issues

→ KEK ILC Planning Office submitted written answers to all of them

6th meeting on Oct. 1 (13:00-16:00):

- Significance of Higgs studies and communities consensus: Shoji Asai (Asai Committee Chair)
- KEK's mission and ILC, international cooperation, cooperation in Asia: Masa Yamauchi (KEK DG)

7th meeting on Oct. 10 (13:00-16:00) : joint with the subcommittee

- Particle Physics and ILC: Yutaka Hosotani (theory)
- **Closed discussions** on points to be addressed in the final report
→ KEK ILC Planning Office submitted
a) written answers to additional questions from the committee,
b) a supplementary document to clarify issues discussed in the meeting.

8th meeting on Oct. 16 (13:00-16:00) : joint with the subcommittee

- ILC in Particle Physics: Tsuyoshi Nakaya (neutrino)
- **Closed discussions** on points to be addressed in the final report

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→Lyn sent the TEXAS statement to the chairman..

9th meeting on Oct. 31 (10:00-12:00) : joint with the subcommittee

- **Closed discussions** on draft report?
- →People are sending letters to the chairman now.

10th meeting on Nov. 14 (15:00-17:00) : joint with the subcommittee

- 1st draft shown in the 1-hour open session
- **Further discussions** on the draft report in the closed session
- Letters have been uploaded to the SCJ web site.

11th meeting on Nov. 21 (10:00-12:00) : joint with the subcommittee

- **Closed discussions** on inputs from proponents
- The two documents sent from us are now uploaded to the SCJ web site.

Our Response

The SCJ decided to discuss their final report behind the closed doors, so no official news from their meeting.

As a matter of fact, ***KEK ILC planning office and Tohoku ILC promotion committee separately submitted documents*** to the SCJ chairman, Prof. Iye two days before their last meeting on Nov. 21 ***in order to clarify points the SCJ committee misunderstood or misinterpreted.*** The documents are available now from the Official SCJ ILC committee's web page.

We then had two ***2-hour press conferences*** one at 2PM and the other at 5PM to explain the contents of the submitted documents the day before their final meeting.

Atsuro Suzuki (former KEK DG) ***and Kunihisa Yamura*** (chair of Tohoku chamber of commerce and industry) ***san*** were there from Tohoku and each ***gave a very nice speech.***

I think ***the press conference is making a very positive effect now, judging from coverage by major Japanese newspapers and TV channels.***

As a matter of fact, ***multiple journalists attending the press conference were complaining about Iye's decision/attitude to make their last meeting a closed one.*** Apparently they wanted to hear open discussions.

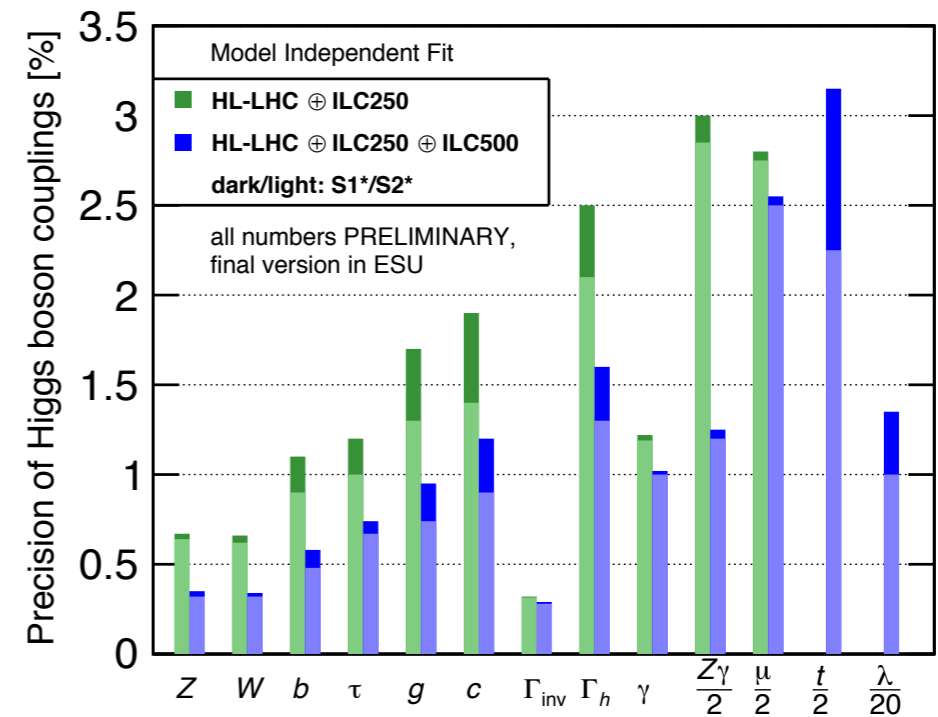
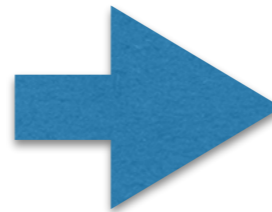
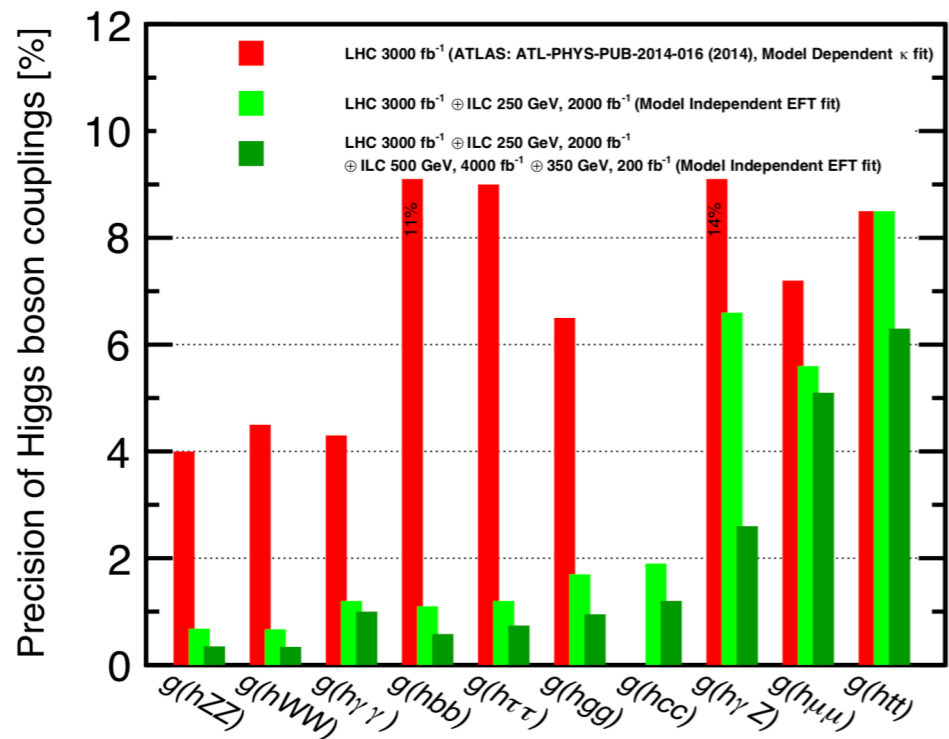
Rumor says that ***the SCJ committee spent most of their time discussing these documents on Nov. 21 instead of finalizing their draft report shown on Nov.14. The report would be finalized through e-mail exchanges among the committee members very soon and would be checked by referees selected by the SCJ EB.***

LCC Physics WG

New Manhattan Plots

for comparison with new HL-LHC projections

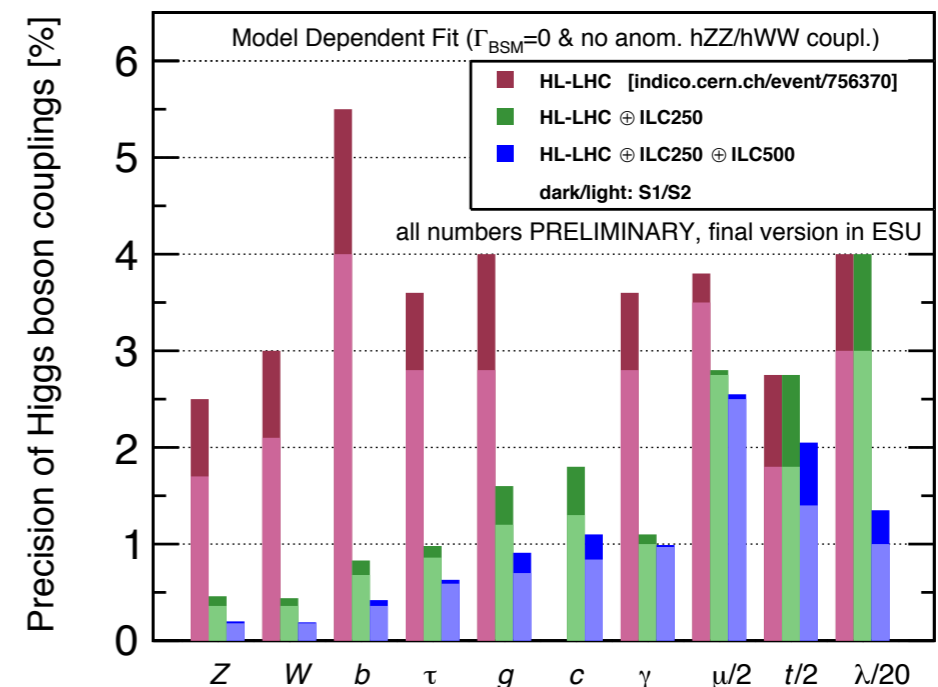
ILC scenario 2 and EFT analysis



New plots shown in Frank Simon's HC2018 talk today

Disclaimer

LHC numbers are subject to change, should be updated when the HL-LHC yellow report comes out.



ILD Physics WG Activities

Today

Update on benchmark analyses

→ *Adrian's talk on dE/dx*

→ *Yuichi's talk on $ee \rightarrow tt$ semi-leptonic*

Please

use github (ILDAnaSoft), produce at least skeletons of analysis notes, and check the benchmark status spreadsheet.

Higgs Couplings 2018: Nov.26-30 in Tokyo

<https://www.icepp.s.u-tokyo.ac.jp/hc2018/>

4 talks scheduled for tomorrow:

- Coupling strength and CP properties in $H \rightarrow \tau^+\tau^-$ at ILC: ***Daniel Jeans***
- Higgs self-coupling projections at the ILC: ***Junping Tian***
- Sensitivity to anomalous VVH couplings at the ILC: ***KF on behalf of Tomohisa Ogawa***
- Prospects of measuring Higgs boson decays into muon pairs at the International Linear Collider: ***Shin-ichi Kawada***

Check rehearsal page for draft slides:

<https://agenda.linearcollider.org/event/8088/>

Proposed S&A meeting schedule

Nov. 28: KF

Dec. 5: Frank

Dec. 12: Akiya

...

***Weekly physics conveners' meeting every Tuesday
at 13:00 CERN time***

Weekly S&A meeting until all inputs for IDR become available

***Another Round of ILD Benchmarking Days at KEK
on Feb. 23-25***

<https://agenda.linearcollider.org/event/8086/overview>

Conveners' ML:

ild-physics-conveners@desy.de

Use this mailing list to send your talk request.