

INTERNATIONAL WORKSHOP ON FUTURE LINEAR COLLIDERS

# LCWS STRASBOURG 2017

**23-27 October**  
**Convention Center**  
**(Palais des Congrès)**  
**Strasbourg, France**

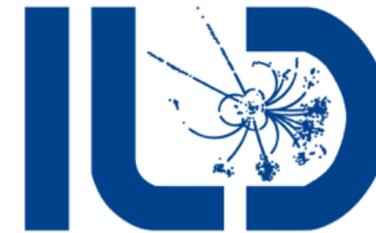
The workshop will be devoted to the study of the physics case for a high energy linear electron-positron collider, taking into account the recent results from LHC, and to review the progress in the detector and accelerator designs for both LC and CLIC projects.

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<http://lcws2017.iphc.cnrs.fr>



# Introduction (+ PSB report)

ILD meeting in Strasbourg

October 25, 2017

Kiyotomo Kawagoe

Kyushu University

# Agenda of this half-day meeting

- Introduction (K. Kawagoe)
- Report by the physics group (K. Fujii)
- Toward individual particle reconstruction (T. Tanabe)
- Report by the technical group (C. Vallee)
- Recent activities on integration (K. Buesser)
- Status of the ECAL simulation and Model Validation (D. Jeans)
  
- Software: Status and Presentation for Optimization (F. Gaede)
- ILD strategy (T. Behnke)
- Discussion (all)

# Our Goal



1. Define a performance/ cost optimized ILD detector
2. Demonstrate the performance of the ILD concept
3. Provide a basis (event sample) for future physics studies of fully simulated and as realistic as possible events.
4. Document the
  1. Design
  2. Engineering
  3. Performanceof the ILD detector model

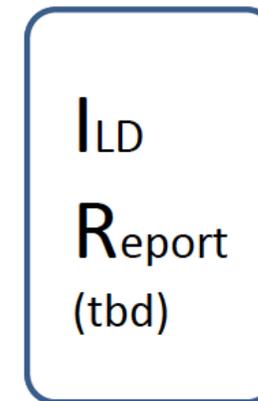
Ties's talk on Monday

# The Deliverable



Document the work in a comprehensive ILC document

- ILC philosophy and thinking
- ILC overall design
- ILC subdetector choices and options
- ILC engineering design
- ILC integration with ILC and into the Kitakami site
  
- ILC performance
  
- ILC physics performance



The ILC concept

Anticipated early<sub>9</sub>2019

# ILD meetings

- Monthly ILD phone meeting, usually on first Tuesday
- Santander (ECFA-LCWS 2016, 30 May – 5 June, 2016)
- Morioka (LCWS2016, 5-9 December, 2016)
- Software and Technical meeting, Lyon, 24-28 April, 2017
- SLAC (AWLC2107, 26-30 June 2018)
- Strasbourg (LCWS2017, 23-27 October 2017)
- Ichinoseki, 20-22 February 2018
- Fukuoka (ALCW2018, 28 May – 01 June) probably

# ILD meeting in Ichinoseki

20-22 (Tue-Thu) February 2018

- Hosted by T. Sanuki (Tohoku)
- Possible satellite meetings before/after the main meeting
- Optional half-day tour to visit the candidate site may be arranged on your request.



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# PSB report

<https://confluence.desy.de/display/ILD/ILD+Publication+and+Speakers+Bureau>

# Publication rules

The latest version of PSB's proposal (v3.2) can be found on the confluence. Two major changes from v2:

1. Additional sentences for arXiv submission: “We encourage authors to submit ILD papers, topical papers, public notes, and conference proceedings to the arXiv after the ILD review process is completed. Draft ILD publications should not be uploaded to preprint servers before the completion of the review process.”
2. Modification of review process of conference proceedings: “Drafts of conference proceedings are circulated to ILD at least ten days before the submission deadline of the conference. Every ILD member is welcome to comment in addition. A PSB member performs a light-weight review within four working days. The author circulates the updated draft to ILD at least two days before the submission deadline.”

# Standard “Acknowledgements”

to be used in ILD simulation-based publications

“We would like to thank the LCC generator working group and the ILD software working group for providing the simulation and reconstruction tools and producing the Monte Carlo samples used in this study. This work has benefited from computing services provided by the ILC Virtual Organization, supported by the national resource providers of the EGI Federation and the Open Science GRID.”

(this can be found on the confluence)

# Status of topical papers

1. “CP violating top couplings”, by M. Vos et al.,
  - Reviewers: Junping Tian and Daniel Jeans
  - ILD+CLICdp+theorists
  - The review process completed: → **ILD-PHYS-2017-001**
2. “tau-tau CP analysis” by Daniel Jeans
  - Draft being reviewed by Graham Wilson and Klaus Desch
3. “Full simulation study of the process  $e+e\rightarrow bb$  at  $\sqrt{s} = 250$  GeV at the ILC”, Sviatoslav Bilokin et al.
  - Draft being reviewed for submission to a journal by Keisuke Fujii and Mikael Bergrén
  - arXiv: <https://arxiv.org/abs/1709.04289>
4. “Sensitivity to anomalous VVH couplings at the ILC”, Tomohisa Ogawa et al.
  - To be reviewed by Jenny List and Ivanka Bozovic-Jelisavcic,
5. “Naturalness and light Higgsinos”, Suvi, Tomohiko, et al.
  - Reviewers to be selected

# Status of conference talks

- EPS-HEP 2017, Venice, July 5-12
  - 2 oral and 2 poster presentations from ILD
  - 3 oral presentations from ILC Physics study working group (+CLICdp)
  - Proceedings circulated in ILD for comments.
  - [ILD-PHYS-PROC-2017-001 ... 006](#)
- Rencontre de Vietnam, July 11-15
  - An invited talk on Dark Matter searches presented by Moritz Habermehl
  - Draft proceedings being circulated
  - [ILD-PHYS-PROC-2017-007](#)
- VERTEX 2017, September 11-15
  - An invited talk on “Vertex and tracking for ILC detectors” presented by Luis Alejandro PÉREZ PÉREZ
- CHEF2017, Lyon, October 2-5.
  - Five presentations were given on behalf of “ILD-SiW ECAL group”.
- IEEE NSS/MIC, Atlanta, October 21-28.
  - A poster on the general ILD detector concept to be presented by Wataru Ootani.
- HEP 2018 conference in Chile, January 8-12.
  - A general ILD abstract to be submitted (deadline December 9)
- High Energy Physics Conference in Hong Kong, Jan 2018, includes a workshop on “future detectors for e+e- colliders”
  - An invited talk on “the ILD detector concept”
  - An invited talk on “Particle ID and timing”