



Report from Physics Coordinators

Keisuke Fujii
on behalf of the Physics WG
October 26, 2022

IDT Phys/Det WG (WG3)

<https://linearcollider.org/team/wg3/>

Last WG3 Meeting yesterday on October 25

- ***IDT EB report from Jenny***
 - ***IDT-WG3 will meet ILC-J today to identify joint activities***
 - ***Updating IDT-WG3 web pages***
 - ***Int'l Expert Panel met last week, reviewing SKA case to formulate general steps to project approval applicable to ILC.***
- ***C3 report by Michael, another WS in spring***
- ***Subgroup reports***
 - ***Physics: next open meeting on Nov.17***
 - ***...***

Updated!

WG3 Organisation and mandates

Chair: Jenny List (DESY/CERN)

Deputies: Roman Pöschl (IJCLab), Michael Peskin (SLAC), Daniel Jeans (KEK), Jinlong Zhang (ANL)

Coordinator and Deputy coordinator(s)

Steering Group

Subgroup conveners, Coordinator and Deputy Coordinator(s)

Kiyotomo Kawagoe (Kyushu),
Carsten Hensel (Rio de Janeiro),
Ivanka Božović Jelisavčić (Belgrade)

Speaker's bureau

Andy White (UT Arlington), Ties Behnke (DESY), Yuanning Gao (Peking), Frank Simon (MPP), Jim Brau (Oregon), Keisuke Fujii (KEK), Phil Burrows (Oxford), Francesco Forti (INFN), Filip Zarnecki (Warsaw),
Patty McBride (Fermilab), Mihoko Nojiri (KEK), Timothy Nelson (SLAC), Kajari Mazumdar (Mumbai), Phillip Urquijo (Melbourne), Dmitri Denisov (Brookhaven), Hitoshi Murayama (Berkley/Tokyo)

Interface with machine

Coordinate the interactions between the accelerator and facility infrastructure planning and the needs of the experiments

Karsten Buesser (DESY), Yasuhiro Sugimoto (KEK),
Roman Poeschl (IJCLab), Tom Markiewicz (SLAC)

Detector and technology R&D

Provide a forum for discussion and coordination of the detector and technology R&D for the future experimental programme

Marcel Vos (Valencia), Katja Krueger (DESY),
Jinlong Zhang (ANL), Shinya Narita (Iwate)

Software and computing

Promote and provide coordination of the software development and computing planning

Frank Gaede (DESY), Jan Strube (PNNL),
Daniel Jeans (KEK)

Physics potential and opportunity

Encourage and develop ideas for exploiting the physics potential of the ILC collider and by use of the beams available for more specialised experiments

Michael Peskin (SLAC), Junping Tian (Tokyo)
Aidan Robson (Glasgow)

Physics Potential & Opportunity Group

- Schedule for regular open meetings:

Feb. 10/11: <https://agenda.linearcollider.org/event/9354/>

Feb. 28, Mar. 1, 3: Mini-WS on BSM at ILC

<https://agenda.linearcollider.org/event/9575/>

Mar. 10, Snowmass, BSM mini-WS, QCD, Green ILC

<https://agenda.linearcollider.org/event/9355/>

Apr. 14: mb, BSM, ALR

<https://agenda.linearcollider.org/event/9356/>

May 12: Mw

<https://agenda.linearcollider.org/event/9357/>

Jun. 9: flavor, dark photon, SMEFT

<https://agenda.linearcollider.org/event/9680/>

Sep. 15: dark photon, mass reach of Higgs coupling meas., $H \rightarrow \text{inv.}$

<https://agenda.linearcollider.org/event/9681/>

Oct. 13: EFT, y_{top} , LL dark photon

<https://agenda.linearcollider.org/event/9682/>

Nov. 17:

- Snowmass meetings;

EF workshop Aug. 30 - Sep.3

<https://indico.fnal.gov/event/49756/>

Snowmass Day (all frontiers) Sep. 24

<https://indico.fnal.gov/event/50538/>

EF workshop Mar. 28 - Apr.1

<https://indico.fnal.gov/event/52465/>

Snowmass Community Summer Study

<http://seattlesnowmass2021.net>

Snowmass Agora

Dec. 15: Linear e+e- Colliders

<https://indico.fnal.gov/event/52161/timetable/>

Jan. 19: Circular e+e- Colliders

<https://indico.fnal.gov/event/52534/timetable/>

Feb. 16: 2022: Muon Colliders

<https://indico.fnal.gov/event/53010/timetable/>

Software & Computing Group

Software tutorials <https://agenda.linearcollider.org/category/273/>

- July 21, Introduction to iLCSoft: <https://agenda.linearcollider.org/event/9272/>
- August 18, LCFIPlus: <https://agenda.linearcollider.org/event/9318/>
- October 13, SGV fast simulation: <https://agenda.linearcollider.org/event/9394/>
- May 18, MarlinKinFit by Jenny: <https://agenda.linearcollider.org/event/9687/>

ECFA Higgs Factory WG meetings

- April 8, physics with light quarks: <https://indico.cern.ch/event/1138771/>
- April 20-22, First workshop of the Higgs/Top/EWK subgroup of WG1:
<https://indico.cern.ch/event/1132480/>
- May 4-5, First topical meeting on Reconstruction (WG2 activity):
<https://indico.cern.ch/event/1124095/>
- May 6, Higgs self-coupling (including LHC status+prospects):
<https://indico.cern.ch/event/114376/>
- Oct. 5-7, 1st ECFA WS on e+e- Higgs/EW/Top Factories: deadline June 30
<https://indico.desy.de/event/33640/>

All workshops and seminars of the ECFA Higgs Factory initiative (WG1+WG2) can be found at any time under the Indico category: <https://indico.cern.ch/category/14055/>

ILD Physics WG Activities

***- Joint Effort with Software WG
and IDT WG3 -***

Today (October 26)

- ***Validation of the new 2f_hadronic samples at 500 GeV by Jesus***
- ***Neutral kaon energy reconstruction in ILD with machine learning technology by Sergey***

Proposed S&A meeting schedule

Oct 26: Daniel

Nov 9: KF

Nov 23: Filip

Dec 7: Frank

S&A meeting usually every two weeks on Wednesday at 14:00 CERN time

Schedule also on

<https://confluence.desy.de/display/ILD/ILD+Physics+Working+group>

Physics conveners' meeting every two weeks interleaved with S&A meetings at 14:30 CERN

Conveners' ML:

ild-physics-conveners@desy.de

Use this mailing list to send your talk request.

Stay safe!