

IDT-WG3 News



ilc
ilc international development team

Jenny List
ILC Europe meeting
4 October 2023



Reminder:

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), Taikan Suehara (Kyushu), Phil Burrows (Oxford), Francesco Forti (INFN), Filip Zarnecki (Warsaw), Shoji Asai (U Tokyo),
Patty McBride (Fermilab), Mihoko Nojiri (KEK), Timothy Nelson (SLAC), Kajari Mazumdar (Mumbai), Phillip Urquijo (Melbourne), Dmitri Denisov (Brookhaven), Hitoshi Murayama (Berkeley/Tokyo), Claude Vallee (Marseille)

Interface with machine

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

Karsten Buesser (DESY), Tomoyuki Sanuki (Tohoku),
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)

IDT WG3 - Speakers Bureau

ILC Talks etc

- very active Speakers' Bureau <https://linearcollider.org/team/wg3/speakers-bureau/> , idt-wg3-sb@ml.post.kek.jp
- e.g. organized plenary talks at
 - Higgs Hunting 2023 <https://indico.ijclab.in2p3.fr/event/9063/>
 - Scalars 2023 <http://indico.fuw.edu.pl/conferenceDisplay.py?ovw=True&confId=66>
 - African Conference on High Energy Physics (ACHEP) <https://indico.marwan.ma/event/1/>
 - Higgs 2023 <https://indico.ihep.ac.cn/event/18025/>
- upcoming:
 - 30th Cracow Epiphany Conference on Precision Physics at High Energy Colliders (Epiphany2024) <https://epiphany.ifj.edu.pl/epiphany2024/>
IFJ PAN, Krakow, Poland, 8-12 January 2024

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Please let them know

- if you'd be available to give a talk (always looking for speakers!)
- if you've been invited to give a talk
- if you spot a conference where ILC should be present

IDT WG3

Physics Opportunities

- **WG3 Open Physics meetings**
 - continue to be well attended
 - indico category <https://agenda.linearcollider.org/category/266/>
 - last meeting Sept 14
 - next: October 19 with highlights from 2nd ECFA WS
 - from November: winter time => back to 11pm in Europe.. :(



- **ECFA WS**

- many ILC related contributions / participants
- ILC quite well represented in Focus Topics teams, but certainly room for more people to get active / invest students etc
- revive topical groups via contributions to ECFA study and later LCWS

IDT-WG3-Phys Open Meeting

Thursday 14 Sept 2023, 15:00 → 16:59 Europe/Zurich

Description Topic: IDT-WG3-Phys Open Meeting

Join Zoom Meeting

<https://desy.zoom.us/j/84806732791>

Meeting ID: 848 0673 2791

Passcode: 314159

15:00 → 15:30 **Sustainability of the construction and operation of the C-cubed Higgs factory**

Speaker: Brendon Bullard (SLAC)

C3sustainability_bb...

15:30 → 16:00 **Searching for dark neutrinos through exotic Higgs decays at the ILC**

Speaker: Simon Thor

IDT-WG3-Phys Open...

16:00 → 16:30 **Recent progress on flavor tagging algorithm by machine learning**

Speaker: Taikan Suehara (Kyushu University)

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Software & Computing

- plan to continue topical meetings, eg on flavour tagging with ML
- **next target:**
 - **provide a common mechanism to train and apply ML-based tools in Marlin processors / Gaudi algorithms**
 - **first prototype by:**



- **ECFA WS**
 - significant contributions to Key4HEP tutorial

IDT WG3

Detector Technologies & MDI Groups

Detector Technologies:

- plan to continue topical meetings, eg on fast timing detectors
- **DRD Collaborations:**
collect information about representation of R&D targets relevant for ILC

MDI:

- typically very project-specific, extremely hard to impossible to find funding for ILC-specific studies
- will join ITN Information Meeting, try to team up with WPs 15' & 16' (to be discussed)

- July 8-11 in Tokyo <https://agenda.linearcollider.org/event/10134>
- IAC and PC have been invited
- expect first program committee meeting later this month
- significant contributions from WG3 areas, will be regular topic at WG3 steering group meetings

Program Committee (PC)

(only listing confirmed members)

Sergey Belomestnikh (FNAL)
Phil Burrows (U. Oxford, co-chair)
Nathaniel Craig (UC Santa Barbara)
Motoi Endo (KEK)
Angeles Faus-Golfe (IJCLab)
Jie Gao (IHEP)
Masaya Ishino (U. Tokyo)
Daniel Jeans (KEK, chair)
Andy Lankford (UC Irvine)
Benno List (DESY)
Jenny List (DESY)
Tom Markiewicz (SLAC)
Shinichiro Michizono (KEK, co-chair)
Laura Monaco (INFN Milano)
Emilio Nanni (SLAC, co-chair)
Shinya Narita (Iwate U.)
Yasuhiro Okada (KEK)
Roman Poeschl (IJCLab)
Aidan Robson (U. Glasgow)
Frank Simon (KIT)
Steinar Stapnes (CERN)
Tohru Takahashi (Hiroshima U.)
Geoff Taylor (U. Melbourne)
Makoto Tomoto (KEK)
Caterina Vernieri (SLAC)
Akira Yamamoto (KEK)