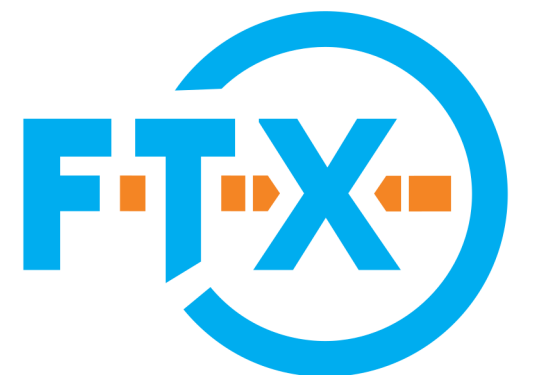


News from IDT-WG3

Physics, software, Detector R&D and MDI

Jenny List (DESY)
ILC Europe Meeting, March 23 2022



ILC Snowmass WP

We all together :)

- **ILC Snowmass Whitepaper** submitted:
<https://arxiv.org/abs/2203.07622>
- many thanks to all who contributed, but in particular to Michael Peskin!
- We will continue to update this paper through the July Snowmass meeting. Please send additions and corrections to Michael and other relevant editors.
- If not yet done: please sign the paper as supporter at
<https://agenda.linearcollider.org/event/9135/>

DESY-22-045, IFT-UAM/CSIC-22-028,
KEK Preprint 2021-61, PNNL-SA-160884,
SLAC-PUB-17662
March 2022

arXiv:2203.07622v1 [physics.acc-ph] 15 Mar 2022

The International Linear Collider: Report to Snowmass 2021

THE ILC INTERNATIONAL DEVELOPMENT TEAM AND THE ILC COMMUNITY

ABSTRACT

The International Linear Collider (ILC) is on the table now as a new global energy-frontier accelerator laboratory taking data in the 2030's. The ILC addresses key questions for our current understanding of particle physics. It is based on a proven accelerator technology. Its experiments will challenge the Standard Model of particle physics and will provide a new window to look beyond it. This document brings the story of the ILC up to date, emphasizing its strong physics motivation, its readiness for construction, and the opportunity it presents to the US and the global particle physics community.

Recent WG3 activities

Physics Opportunities, Software

- **Physics Opportunities** and sub-groups very active
 - BSM group held mini-Workshop Feb 28 / Mar 2:
<https://agenda.linearcollider.org/event/9575/>
 - monthly Open Physics meeting series <https://agenda.linearcollider.org/category/266/>
 - last meeting Mar 10/11 with highlights from the ILC Snowmass Whitepaper (BSM, QCD, Green ILC)
 - next meetings: April 14, May 12, ...
- **Software & Computing**
 - tutorial series went from monthly schedule to on-demand
=> you are invited to suggest topics and/or speakers!
 - possible next topic: kinematic fitting, tba

Recent WG3 activities

Detector R&D, MDI & Speakers Bureau

- **Detector R&D**
 - contributions to Snowmass whitepaper on new technologies and performance requirements
 - started to form sub-group on performance requirements
- **MDI**
 - held very successful series to collect and review the state-of-the art:
<https://agenda.linearcollider.org/category/270/>
 - concluded in February => workplan for pre-Lab, identified some “high-priority” items
- **Speakers Bureau**
 - very active, many parallel talks, trying to get more plenary talks
 - looking for suggestions for ICHEP contributions (deadline Mar 31)

WG3 is (still) quite active
next steps depend on whether ICFA continues the IDT (or an equivalent structure)