Report from Physics Coordinators

Aleksander Filip Żarnecki on behalf of the Physics WG



ILD Software and Analysis meeting March 29, 2023



News

New composition of the ILD management team, as proposed by the spokesperson (Ties Behnke), just approved in the IA vote:

- Deputy spokesperson: Kiyotomo Kawagoe
- Physics coordinator: Filip Zarnecki, deputy Taikan Suehara
- Software coordinator: Frank Gaede, deputy Daniel Jeans
- Technical coordinator: Mary-Cruz Fouz, deputy Karsten Buesser

Many thanks to Keisuke Fujii for his leading role, over the last years, in coordinating ILD physics activities and shaping of the ILD physics program



ILC IDT WG3 activities

Last meeting yesterday, focused on ILC timeline discussions

IDT view on the ILC project timeline -success oriented and assuming no major incident-

Technology Network Phase			Preparatory Phase			Construction Phase ~10 years for the construction and commissioning								
2	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	

This is also related to the expected detector timeline

⇒ details to be presented at coming ILD General Meeting

ICFA has agreed to prolong the IDT activity working toward the preparatory phase.



ECFA Focus topics

As presented by Jenny at the ILD General Meeting on March 7th indico link

Focus Topics

at a glance

Table 1: Overview of focus topics and relevant center-of-mass energies.

X

					relevant -	\sqrt{s}	
	topic	lead group	91 GeV	161 GeV	240/250 GeV	350-380 GeV	$\geq 500\mathrm{GeV}$ a
Higgs/EW	1 HtoSS	HTE			X	X	x
Higgs/EW	2 ZHang	HTE (GLOB)			X	X	x
Higgs/EW	3 Hself	GLOB			X	X	X
Higgs/EW	4 Wmass	PREC		X	X	X	
Higgs/EW	5 WWdiff	GLOB			X	X	x
Top/HF/QCD	6 TTdet	HTE				X	
Top/HF/QCD	7 TTscan	GLOB (HTE)				X	
Higgs/EW	8 LUMI	PREC	X	x	x	x	x
BSM	9 EXscalar	SRCH	x	x	x	x	x
BSM	10 LLPs	SRCH	x	x	x	x	x
BSM	11 EXtt	SRCH				x	x
Top/HF/QCD	12 CKMWW	FLAV		x	X	x	x
Top/HF/QCD	13 BKtautau	FLAV	X				
Top/HF/QCD	14 TwoF	HTE	X	x	X	X	x

FLAV (PREC)

PREC (FLAV)

Top/HF/QCD

Higgs/EW

A.F.Żarnecki

15 BCfrag

16 Gsplit

X

х

x

a not main target (apart from topic 3), listed for completeness

DESY. ECFA Focus Topics & ILD | ILD General Meeting | 7 March 2023 | Jenny List



ECFA Focus topics

We encourage you to get involved in the ECFA study activities. It is important to have ILD results well presented in the final report. ILD contacts were appointed for those topics were we see ILD contribution relevant.

1	#	topic lead group		ILD group	ILD contact person			
1	1	HtoSS	HTE	Higgs/EW	Taikan Suehara			
ı	2	ZHang	HTE (GLOB)	Higgs/EW	Ivanka Bozovic and Natasa Vukasinovic			
ı	3	Hself	GLOB	Higgs/EW	Junping Tian			
ı	4	Wmass	PREC	Higgs/EW	Graham Wilson			
ı	5	WWdiff	GLOB	Higgs/EW				
ı	6	TTdet	HTE	Top/HF/QCD	Marcel Vos			
ı	7	TTscan	GLOB (HTE)	Top/HF/QCD	Marcel Vos			
ı	8	LUMI	PREC	Higgs/EW	Ivanka Bozovic			
	9	EXscalar	SRCH	BSM	Mikael Berggren			
	10	LLPs	SRCH	BSM	Filip Zarnecki			
	11	EXtt	SRCH	BSM				
	12	CKMWW	FLAV	Top/HF/QCD				
	13	BKtautau	FLAV	Top/HF/QCD	_			
	14	TwoF	HTE	Top/HF/QCD	Adrian Irles and Roman Pöschl			
	15	BCfrag	FLAV (PREC)	Top/HF/QCD	Adrian Irles			
	16	Gsplit	PREC (FLAV)	Higgs/EW	_			



Conferences

LCWS 2023 May 15-19, 2023, SLAC

https://indico.slac.stanford.edu/event/7467/overview Abstract submission deadline (extended): Mar. 31, 2023 Individual submissions encouraged after contacting PSB.

LP 2023 July 17-21, 2023, Melborne https://indico.cern.ch/event/1114856/

Abstract submission still open (no extended deadline given?) Central submissions via PSB.

EPS-HEP 2023 Hamburg, 21-25 August 2023

https://indico.desy.de/event/34916/

Abstract submission open, deadline: June 1.



Coming events

ECFA study seminar, Friday, March 31, at 14:00 CEST (CERN time)
Seminar focused on BSM physics in neutrino sector
https://indico.cern.ch/event/1263455/

ILD General Meeting, Tuesday, April 4th, 14:00 CEST https://agenda.linearcollider.org/event/10002/

ECFA WG1-SRCH topical meeting, Friday, April 14th, 9:00-12:00 CEST Focused on standard end exotic scalars.

https://indico.cern.ch/event/1253605/
There is still room for additional contributions...



Software and Analysis meeting schedule

Usually every two weeks on Wednesday at 14:00 CERN time

- March 29 (Filip)
- April 12 (Frank)
- April 26 (Daniel)

Please use conveners' email list, if you want to present your results ild-physics-conveners@desy.de

Physics conveners' meeting every other Wednesday, also at 14:00 CERN time

Today

New Angles on Fast Calorimeter Shower Simulation (Peter McKeown)