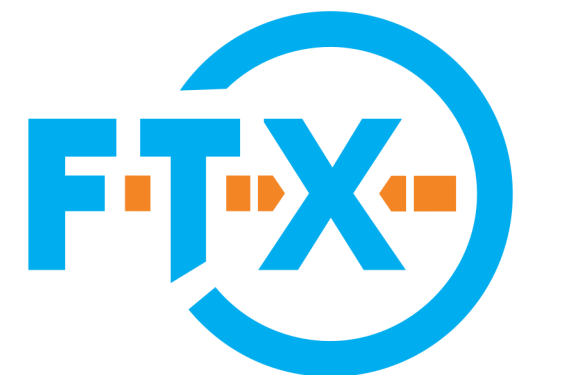


News from IDT and LCWS

WG2, WG3, LCWS, miniLC School

Jenny List (DESY)
ILC@DESY General Project Meeting, Feb 19 2021



WG2 - Technical Preparation Document Review

c.f. presentation by Benno at last project meeting

- Technical Preparation Document and preLab R&D plan will be reviewed by an external panel in the next two weeks
- ~10 reviewers, some ILC experts not involved anymore in IDT, some not familiar with ILC

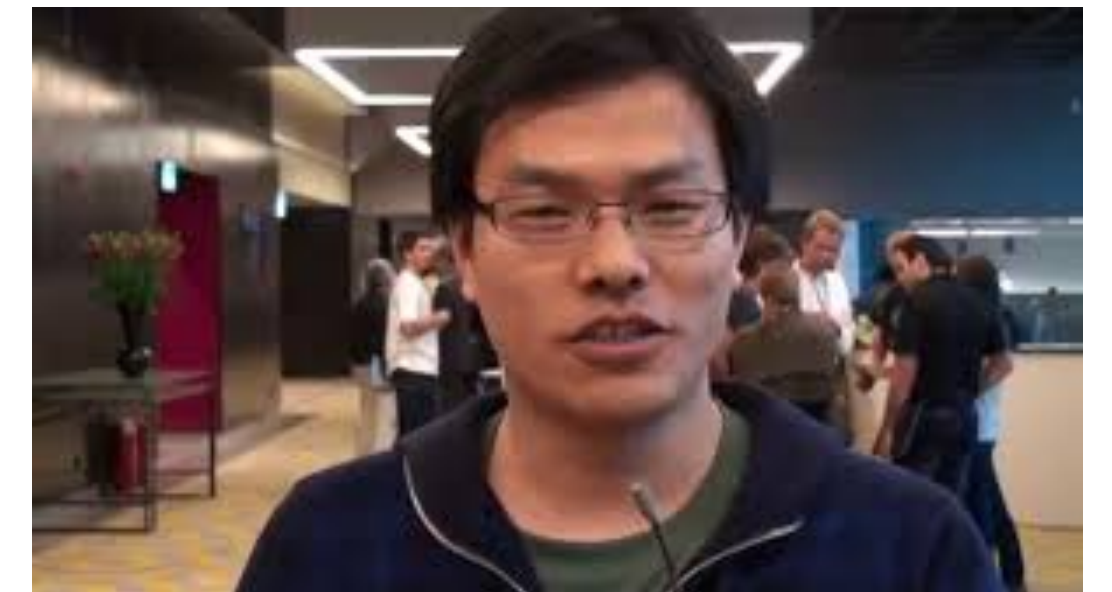
US Pacific time	start	end	title		duration	
23-Feb day 0	6:00	6:10	Charges	Andy Lankford	0:10	10
	6:10	6:30	Overview	Shin Michizono	0:20	15+5
	6:30	7:00	Exec Session		0:30	
24-Feb e+	5:30	5:45	Positron overview	Kaoru Yokoya	0:15	10+5
e-Driven	5:45	6:10	WP-8~10	Masao KURIKI	0:25	20+5
	6:10	6:20	WP-11	Masao KURIKI	0:10	5+5
DR/BDS/Dump	6:20	6:50	DR/BDS/Dump overview	Toshiyuki Okugi	0:30	25+5
	6:50	7:10	WP-17,18	Nobuhiro Terunuma	0:20	15+5
	7:10	8:00	Discussion and Exce Session		0:50	
26-Feb SRF	5:30	6:00	ML/SRF overview	Yasuchika Yamamoto	0:30	25+5
	6:00	6:30	WP1	Sergey Belomestnykh	0:30	25+5
	6:30	7:00	WP2	Yasuchika Yamamoto	0:30	25+5
	7:00	7:30	WP3	Peter McIntosh	0:30	25+5
	7:30	8:30	Discussion and Exce Session		1:00	
3-Mar e-	5:30	5:50	WP-4 (incl. electron overview)	Joe Grames	0:20	15+5
Undulator	5:50	6:15	WP-5~7	Gudrid Moortgat-Pick	0:25	20+5
DR	6:15	6:40	WP-12-14	Toshiyuki Okugi	0:25	20+5
BDS	6:40	7:00	WP-15	Angeles Faus-Golfe	0:20	15+5
	7:00	7:20	WP-16	Brett Parker	0:20	15+5
	7:20	8:10	Discussion and Exce Session		0:50	
4-Mar Day4	6:00	7:00	Discussion(including homework)		1:00	
	7:00	8:00	Exce Session		1:00	

WG3 - Physics Potential and Opportunities

Introduction

Welcoming as conveners:

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



WG3 - Physics Potential and Opportunity

Draft Mandate

The working group on Physics Potential and Opportunity (short: physics group) fosters studies of the ILC's physics case outside and across the detector concept groups, including beyond-collider possibilities. In particular it supports individuals and groups to become newly active in ILC physics. The physics group initiates and coordinates a) a number of topical groups with open participation, giving a forum for collaboration and discussion between theorists and experimentalists; and b) task forces dedicated to specific questions, preparing the physics input to upcoming decisions on the ILC accelerator design, and on detector technology choices. The physics group ensures the connection to, and ILC representation in, relevant beyond-ILC initiatives (ECFA Higgs Factory Study, Snowmass, ...) and documents the ILC physics potential.

WG3 - Physics Potential and Opportunity

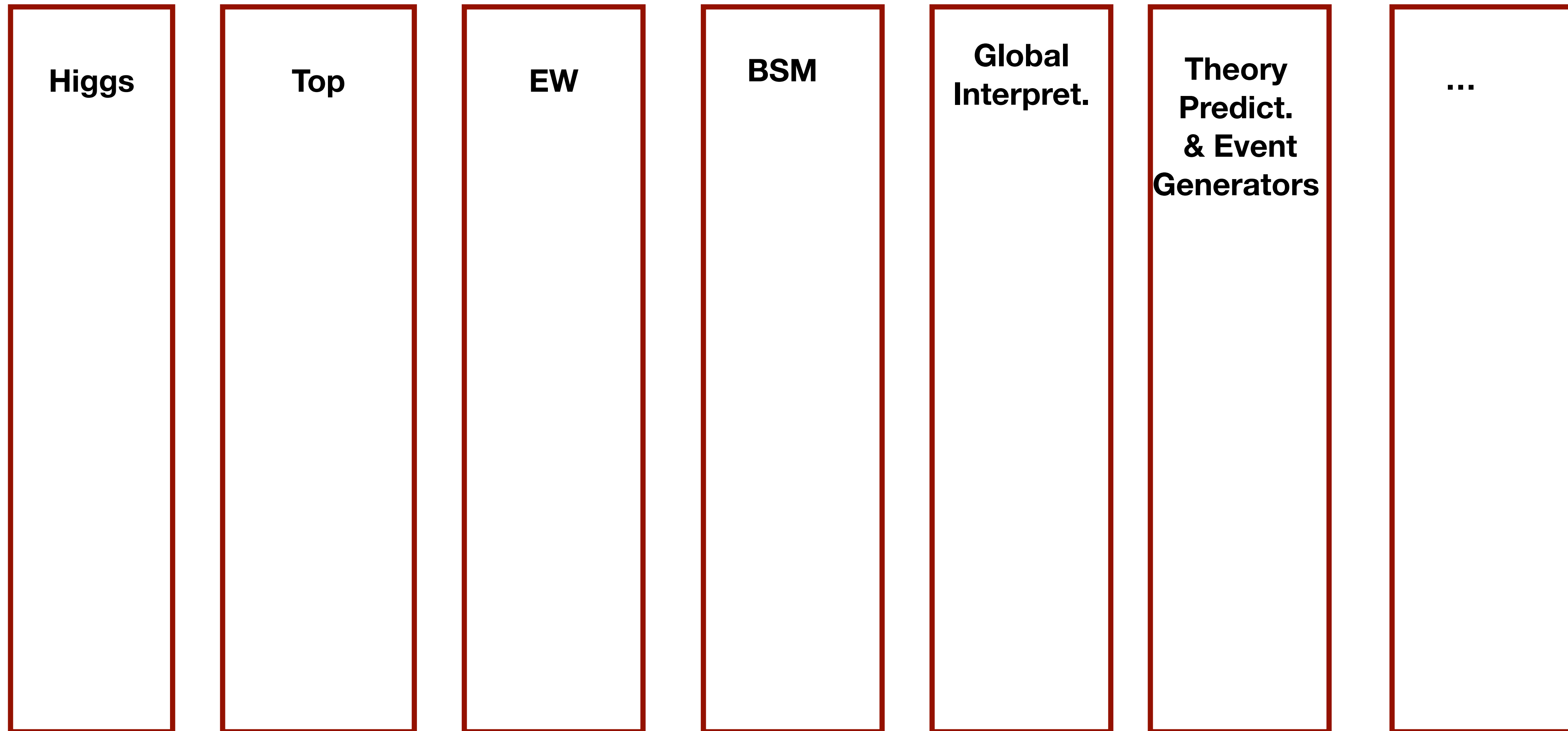
Draft Workplan

- Establish “matrix structure” of
 - topical groups: long-term, broad scope, 2-3 conveners each, incl. 1 newcomer
 - task forces: fixed-term, with specific questions to answer, 1-2 expert convenersall of them open to “bottom-up” participation
- Prepare the **ILC report to Snowmass**, due early 2022. The deadline for the first complete draft is the EoI meeting in October 2021. The existing editorial team encourages contributions from new members, which are expected after a first draft is finished.
- Prepare the **ILC Resource Book**. This would contain reports from the various Topical Groups and Task Forces. The Task Force reports will be needed for the ILC machine design, so the due date of this report should be sometime in 2024-25.
- monthly scientific meetings of the full physics group, interleaved with (strategic) meetings of the conveners:
<https://agenda.linearcollider.org/category/266/>

WG3 - Physics Potential and Opportunity

Draft TG / TF

Topical Groups



WG3 - Physics Potential and Opportunity

Draft TG / TF

Topical Groups

	Higgs	Top	EW	BSM	Global Interpret.	Theory Predict. & Event Generators	...
Task Forces	Positron polarisation: quantify the advantages given by nonzero positron polarization						
	Energy upgrade: recommend a specific energy (between 500-600 GeV ?) for the ILC second stage						
	Is it worthwhile and feasible to pursue a fixed-target / beam-dump program at ILC?						
	Alternative collider modes: importance of collider modes (e-e- / ey / yy) ?						
	Systematic uncertainties: uniform system for reporting systematic errors on projected measurements						
	Role of Z pole/ WW threshold operation at ILC						
	...						

WG3 - Physics Potential and Opportunity

Draft TG / TF

Topical Groups

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	Role of Z pole/ WW threshold operation at ILC						
	...						

Work in progress - stay tuned!

WG3 - Software

Introduction

Welcoming as conveners:

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



Crucial aspect to highlight: **How can we ensure sufficient support for software & computing - person power and hardware - throughout the IDT and the preLab ?**

WG3 - Software & Computing

Draft Mandate

1. To contribute to enlarging the ILC community by bringing in new people and groups and facilitating the start-up of their activities.
2. To estimate and plan the computing resources needed for the ILC (space, power, networks, hardware, manpower on site/campus, ...) and to establish software and computing as central topics for the pre-lab in support of the EOI/LOI process.
3. To ensure connection to and ILC representation in relevant activities beyond ILC, e.g. key4hep, IRIS-HEP, or in the context of the ECFA Higgs Factory study or Snowmass. The use of common software will facilitate the merger of the different groups after the selection of experiments.
4. To coordinate and request Grid resources (storage and CPU) at different Grid sites for ILC accelerator, detector and physics studies under the ILC VO.

LCWS 2021

Status Overview

- March 15-18, fully virtually, hosted by CERN, <https://indico.cern.ch/event/995633/>
- calls for abstracts are out, deadline Feb 21
- No fee, but registration will be required for book-keeping and data protection reasons
- Overarching goal: broaden the community => healthy mix of information for newbies and opportunities to present & discuss ongoing work!

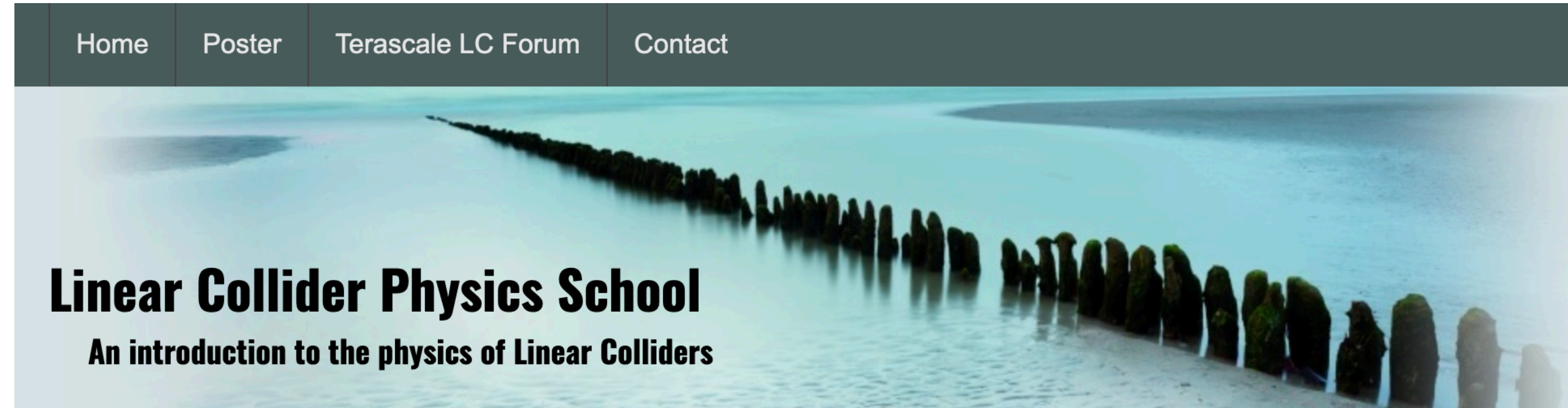
Session	PDT (GMT-7)	CET (GMT+1)	JST (GMT+9)
LC School	March 15, 01:00-05:30	March 15, 09:00-13:30	March 15, 17:00-21:30
PLENARY	March 15, 06:00-09:00	March 15, 14:00-17:00	March 15, 22:00-01:00
Parallel 1	March 15, 14:00-16:00	March 15, 22:00-24:00	March 16, 06:00-08:00
Parallel 2	March 15, 22:00-24:00	March 16, 06:00-08:00	March 16, 14:00-16:00
Parallel 3	March 16, 01:00-02:30	March 16, 09:00-10:30	March 16, 17:00-18:30
Parallel 4	March 16, 03:00-04:30	March 16, 11:00-12:30	March 16, 19:00-20:30
PLENARY	March 16, 06:00-09:00	March 16, 14:00-17:00	March 16, 22:00-01:00
Parallel 1	March 16, 14:00-16:00	March 16, 22:00-24:00	March 17, 06:00-08:00
Parallel 2	March 16, 22:00-24:00	March 17, 06:00-08:00	March 17, 14:00-16:00
Parallel 3	March 17, 01:00-02:30	March 17, 09:00-10:30	March 17, 17:00-18:30
Parallel 4	March 17, 03:00-04:30	March 17, 11:00-12:30	March 17, 19:00-20:30
PLENARY	March 17, 06:00-09:00	March 17, 14:00-17:00	March 17, 22:00-01:00
Parallel 1	March 17, 14:00-16:00	March 17, 22:00-24:00	March 18, 06:00-08:00
Parallel 2	March 17, 22:00-24:00	March 18, 06:00-08:00	March 18, 14:00-16:00
Parallel 3	March 18, 01:00-02:30	March 18, 09:00-10:30	March 18, 17:00-18:30
Parallel 4	March 18, 03:00-04:30	March 18, 11:00-12:30	March 18, 19:00-20:30
PLENARY	March 18, 06:00-09:00	March 18, 14:00-17:00	March 18, 22:00-01:00

Optionally: Poster Sessions, virtual coffee breaks - DESY-FTX will provide remo.co

=> looking for a student volunteer for setting this up!

New: mini-LCSchool @ LCWS

pre-program for students and other newcomers



- Monday March 15, 9:00-13:30
- three 60 min + 15 min lectures on
 - Wolfgang Hillert: LC accelerator physics
 - Georg Weiglein: LC physics program
 - Roman Pöschl: LC detectors
- targeting bachelor / master students or newcomers to ILC
- registration to LCWS required, plan to record lectures

Welcome to the Linear Collider School

Following the success of the Ambleside LC Physics schools (see [here](#) for its latest instalment), a new series of LC Physics schools was started in 2013, 2014 and 2016. The next edition will take place 6-13 May 2018 at Frauenchiemsee, Bavaria, Germany.

**Many thanks to Gudi
for organizing this on
extremely short notice!**