

European ILC community meeting



📅 Wednesday 28 Sept 2022, 10:00 → 12:00 Europe/Zurich

Description <https://desy.zoom.us/j/99341718959>
Meeting ID: 993 4171 8959
Passcode: 190525

10:00 → 10:05 **Welcome**

🕒 5m

Speaker: Steinar Stapnes (CERN)

10:10 → 10:45 **Very brief update on IDT EB matters**

🕒 35m

- ILC panel and visits of KEK management to the US
- LDG meeting and ILC presentation in November
- Lumin and power discussion at eeFACT
- EAJADE
- Sustainability presentations
- ATF
- etc

Speaker: Steinar Stapnes (CERN)

10:50 → 11:20 **WG3, ECFA panels**

🕒 30m

WG3, ECFA panels and DESY conference

Speakers: Aidan Robson (University of Glasgow (GB)), Jenny List (Deutsches Elektronen-Synchrotron (DE))

11:20 → 11:30 **AOB and next meeting**

🕒 10m

Previous meeting 24.8 – brief updates

- Still optimism for MEXT funding request to the ILC Technology Network (aka Priority WPs)
- Meeting with Fabiola Gianotti and Mike Lamont Friday the same week
- Extending the CERN-KEK IDT agreement
- LDG meeting 5.9

Additional developments in September, I will also cover – briefly:

- eeFACT – Higgs factory power and luminosities
- ESSRI 2022 tomorrow
- EAJADE and ATF3 kick-off/CB in January

IDT - KEK - MEXT

Budget request officially submitted:

“MEXT submitted its budget request for 2023 Japanese Fiscal Year to the Ministry of Finance, which includes the KEK funding available for the ILC R&D, 9.7 Oku-yen. This is a factor of two increase compared to the 2022 budget level. The next step is the budget plan of the Ministry of Finance to the Diet, which should be released in December.”

KEK (Yamauchi, Okada, Michizono) visited SLAC and Fermilab during the last two weeks

Next IDT panel meeting will take place 20.10

Focusing on discussing the steps and issues to be solved during the preparation phase of a global project (aiming to reach a general agreement on what these are).

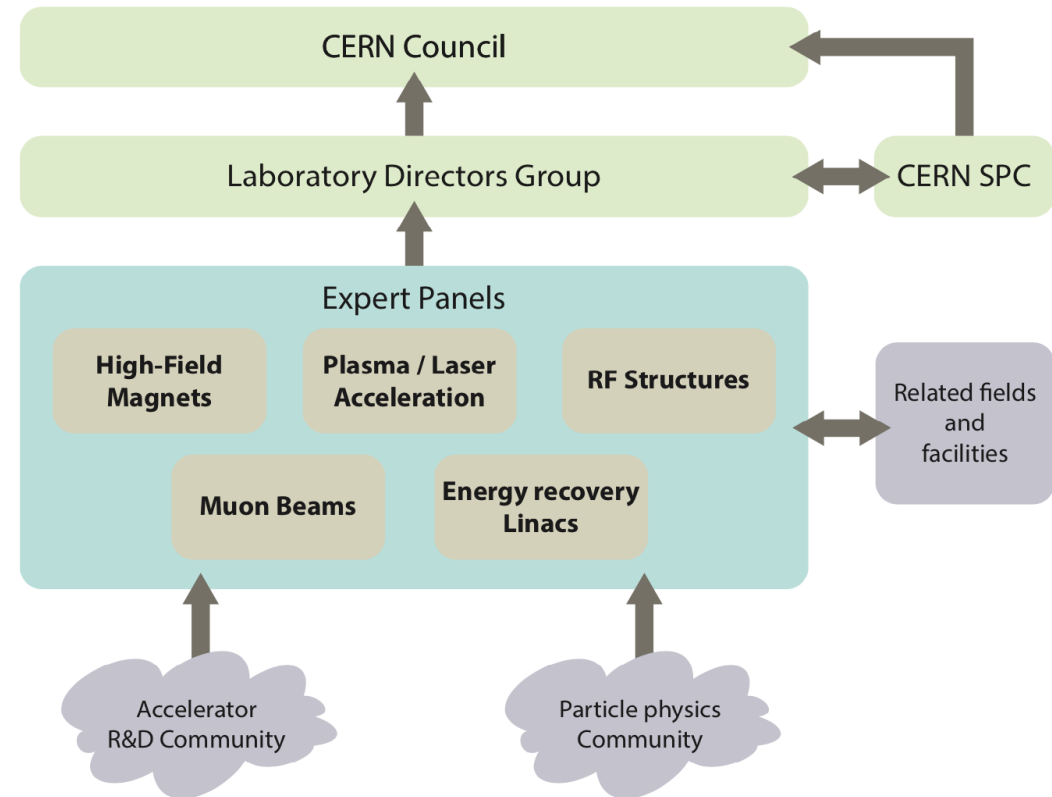
CERN interactions

Updated Fabiola Gianotti and Mike Lamont on the priority WPs and possible European model for executing “our” part:

- Agree that CERN can play coordinating role
- KEK material funding support very important (estimated to 4 MCHF)
- Aim to involve CERN personnel, fellows, PJAS as much as possible within current budget planning
- Limit number of CERN-European Lab contracts (only when funds need to flow)
- Present in LDG meeting this autumn, Nov 10th
- Extending existing CERN-KEK ILC IDT agreement by 2 years

LDG meeting 5.9

- Agreed to present European ILC planning in next meeting 10.11
- Informed leader of the RF panel, Giovanni Bifossi, about ILC programme
- Various panels reports in the Council this week, RF report well written covering among other the RF challenges of LCs (it is not project specific)



(Expected) Time Critical WPs (Europe) Confidential

		material (M\$)					HR (FTE-yr)					
		1	2	3	4	Sum	1	2	3	4	Sum	
WPP	1	Cavity production	0.63	0.51	0.46	0.87	2.47	3.12	2.78	0.58	1.05	7.52
WPP	2	CM design	0.03	0.01	0.00	0.00	0.04	0.35	0.23	0.00	0.00	0.58
WPP	3	Crab cavity	0.25	0.35	0.00	0.00	0.60	1.50	2.00	4.00	2.00	9.50
WPP	4	E- source	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WPP	5											
WPP	6	Undulator target	0.00	0.20	0.30	0.10	0.60	0.00	0.50	1.00	0.00	1.50
WPP	7	Undulator focusing	0.02	0.07	0.00	0.00	0.08	0.60	0.85	0.50	0.00	1.95
WPP	8	E-driven target	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WPP	9	E-driven focusing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WPP	10	E-driven capture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WPP	11	Target replacement	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WPP	12	System design	0.00	0.00	0.00	0.00	0.00	0.70	0.70	0.00	0.00	1.40
WPP	13											
WPP	14	Injection/extraction	0.00	0.05	0.00	0.00	0.05	0.05	0.05	0.00	0.00	0.10
WPP	15	Final focus	0.02	0.10	0.00	0.00	0.12	1.00	1.00	0.50	0.50	3.00
WPP	16	Final doublet	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05
WPP	17	Main dump	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.20
WPP	18											
Total			0.94	1.29	0.76	0.97	3.96	7.36	8.21	6.63	3.60	25.80
		SRF infra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		ATF infra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Total	0.94	1.29	0.76	0.97	3.96	7.36	8.21	6.63	3.60	25.80

Presenting the programme

European presentation of ILC studies

WP1 with three tasks, or WP1-3: SRF

- SRF: Cavities, Module, Crabs

WP2 Sources

- Concentrate on undulator scheme positrons, consult on others

WP3 DR including kickers

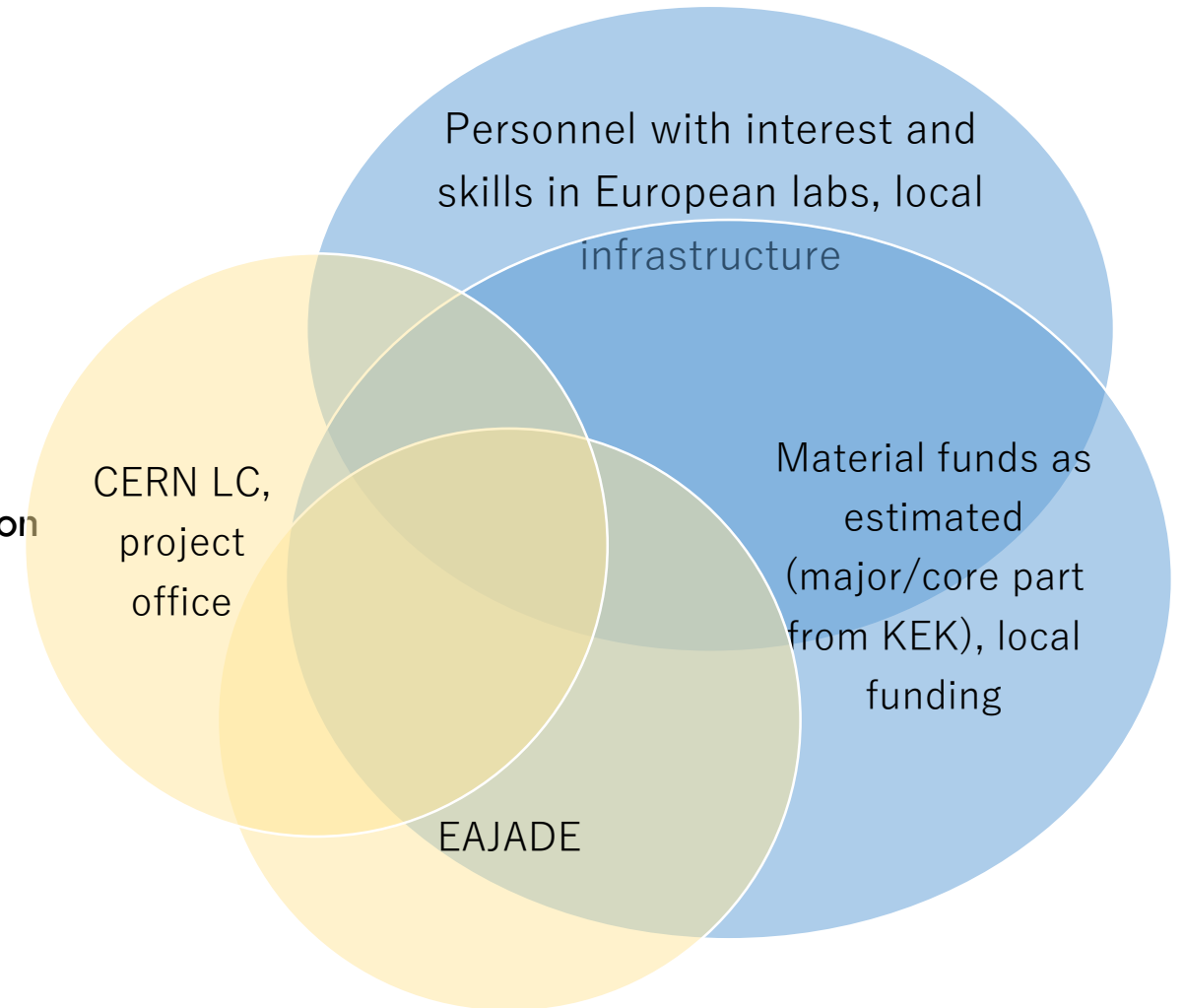
- Low Emittance Ring community

WP4 ATF activities

- Groups active in ATF (including new ones)

WP5 Implementation

- Dump, CE, Cryo, Sustainability, others



65th ICFA Advanced Beam Dynamics Workshop on High Luminosity Circular e+e- Colliders (eeFACT2022)



12–16 Sep 2022
INFN Frascati National Laboratories
Europe/Rome timezone

Enter your search term

During eeFACT:

Interesting discussion session arranged in relation to AF3 (Snowmass), checking a bit more closely the assumption behind the luminosity and power numbers for the various Higgs factory options.

Keep in mind: the Implementation Task force took the proponents Lum & Pow numbers as provided (i.e. no special scrutiny).

Interesting session but no revealing new insights I felt (but I did not attend Thursday part with the less mature concepts).

Link to the talks at: <https://agenda.infn.it/event/21199/timetable/#all.detailed>

17:00	Power limit concerns <i>Link #2 Aula Salvini</i>	Vladimir Shiltsev 17:00 - 17:10
	C^3 <i>Link #2 Aula Salvini</i>	Emilio Nanni 17:10 - 17:30
	CERC and ReLiC <i>Link #2 Aula Salvini</i>	Vladimir Litvinenko et al. 17:30 - 18:00
18:00	HELEN <i>Link #2 Aula Salvini</i>	Sergey Belomestnykh (REMOTE) 18:00 - 18:20
	EIC <i>Link #2 Aula Salvini</i>	Todd Satogata 18:20 - 18:40

Fri 16/09

09:00	FCce <i>Link #2 Aula Salvini</i>	FRANK ZIMMERMANN 09:00 - 09:30
	CEPC <i>Link #2 Aula Salvini</i>	Jie Gao (REMOTE) 09:30 - 10:00
10:00	CLIC <i>Link #2 Aula Salvini</i>	Steinar Stapnes (REMOTE) 10:00 - 10:30
	ILC <i>Link #2 Aula Salvini</i>	Benno List (REMOTE) 10:30 - 11:00
11:00		



Regular meetings of List, Michizono, Saeki, Titov, Stapnes:

Planning underway of how to address sustainability in a more general way, among others carbon footprint of facility and acc. work, of materials and their processing, etc.

Likely a (the) dominating CO2 impact by 2040-50

Relevant for ILC, CLIC, other machines, and EAJADE (WP4)

29–30 Sep 2022
ESRF, Grenoble
Europe/Paris timezone

15:00	MD-1-21, ESRF 14:50 - 15:15 François Debray	ESRF EBS energy management Christian Nevo
	Energy management University Darmstadt Christopher Ripp MD-1-21, ESRF 15:15 - 15:40 Auditorium, ESRF 15:15 - 15:40	
	Coffee break ESRF01, ESRF 15:40 - 16:00	Coffee break ESRF01, ESRF 15:40 - 16:00
16:00	Sustainability at Fermilab and the PIP-II Project Tiffany Price	A big science facility as a living-lab for energy transition:... Frédéric Wurtz
	Sustainability studies for Linear Colliders Steinar Stapnes MD-1-21, ESRF 16:25 - 16:50	ISO 50001 Energy management Nicolas Bellegarde et al. Auditorium, ESRF 16:25 - 16:50
17:00	Investigating energy futures: The KITTEN test facility for Giovanni De Carne	Water, reduction in consumption and treatment of efflu... Serge Deleval
	Sustainable accelerator R&D in the UK Ben Shepherd MD-1-21, ESRF 17:15 - 17:40	Rare earth and Life cycle management Denise Voelker Auditorium, ESRF 17:15 - 17:40
	Closeout	Superconducting alternative magnets Lucio Rossi Auditorium, ESRF 17:40 - 18:05

ESSRI 2022: <https://indico.esrf.fr/event/2/>

See IAEA presentation of Benno:

<https://conferences.iaea.org/event/264/contributions/21011/>

Other points

EAJADE approaching grant agreement – Thomas would normally report. Start February-March.

Initiative to “refresh/renew” ATF collaboration and activities with kick off meeting and CB in January (Terunuma, Faus-Golfe). Will also benefit from EAJADE.