

Regional Report : Detector&Physics Europe

Four main players :

as of early 2016
no big change so far

- 1) **Germany : stable**
- 2) **France : stable**
- 3) **Spain : stable+**
- 4) **UK : increase (STFC £150k~250k€ 2015-[2016](#))**

Remark: activity is not limited to the above countries :

- Italy LC community is small, but
 - >- renewed interest for **Lepton** Collider (ILC-CLIC-**CepC**-muCull)initially 7 workpackages ->- to be refined in 2017, when workplan, manpower, costs, timeline of the Italian-scheme is defined
 - Netherlands NIKHEF started a LC working group (detector&Physics) (no Caccia)
- Europe at large benefits from H2020
- AIDA2020 in progress (SiD + ILD + CLICdp)
boost for R&D activities for the next 3 years
 - RISE2020 for LC detectors
 - eJade : Marie-Curie exchange Europe-Japan for accelerator R&D
-> **extended to superKEKb and ILC MDI**

GERMANY

Frank Simon

New round for BMBF (research ministry) funding (2015-2018) :

- 1.6 Meuros R&D for ILC detector (3 years, 6 universities)
- 1.4 Meuros R&D for ILC machine (SCRF, e+ source)

MPI expects stable funding for next two years

Overall manpower ~ stable

- slight increase thanks to BMBF,
- Dedicated ILC-CLIC groups in DESY and MPI
- Large staff (not LC only) at Universities Bonn, Mainz, Hamburg

Remark : pressures due to ILC not felt to move forward in Japan

Strategy workshop (KET) on Future e+e- Colliders: 2-3 May 2016 (Munich)

<https://indico.mpp.mpg.de/conferenceDisplay.py?confId=4223>

1st of a series -> next European Strategy Update (**ESU**)

- ILC, CEPC, FCC-ee and CLIC review
- Strongest support of German community for the ILC, CLIC R&D should continue

<http://www.ketweb.de/e199632/e199635/e268373/e268421/ee-workshop-conclusions.pdf>

GERMANY (cont'd)

- Linear Collider School (Southern Germany) I ~ 25 Participants
very positive feedback.

<https://indico.desy.de/confRegistrantsDisplay.py/list?confId=11046>

- LCForum (Terascale Alliance Annual Meeting) in November at DESY
 - CALICE (Next Collaboration Meeting at UT Arlington in September)
Overall healthy activities (given the modest amount of funding):
Progress towards technological prototypes and combined test beams.
German activities focus on the analog HCAL (many thanks to BMBF grant!)
-> substantial number of active elements by 2018
 - CLIC:
Most activities in Germany continue to be centered on ILC, but there is
substantial “cross-talk” on various levels.
Formal CLICdp Members :
MPI for Physics,
Munich (Detectors & Physics)
KIT Karlsruhe (Silicon / Electronics)

UK

Phillip Burrows

LCUK consortium (19 institutes)

Funding 2015-2016 : symbolically significant

Total : £150k~**250k€**

allows

- Groups re-engaged in ILC R&D activities on the physics & detector side
- staff to travel to LC workshops and conferences
(April Tokyo + November Vancouver + June Santander : ~15 UK physicists)

~ 20 people are active in Si tracking, calorimetry (via CALICE), DAQ, and physics.

UK Chair of the SiD Institute Board.

Spokesperson of the CLIC accelerator collaboration.

CLIC-UK project on the CLIC machine continues to thrive : prepare for **ESU**

Funding beyond 2016 : **very** difficult if no visibly positive signal comes from Japan before **ESU**

SPAIN

Angeles Faus-Golfe

Spanish Network on Future Linear Collider 2007-2015

- Finished last year ->- Renewed for two years, with a small grant R&D (ILC and CLIC)
- Funding request to Spanish Research Agency (LCC) ->- approved **500 keuros** for three years: Goal is mainly to maintain human capital
It is meant for : Accelerator, Theory, Experimental and Technological groups
- IFIC-CIEMAT-ALBA signed 3 Knowledge and Transfer (CERN)
-> CLIC technology developments (cover 3 years)

-The **Spanish industry** (INDUCIENCIA framework: a big effort to strengthen links with Japan -> **3** industrial meetings organized:

- IPAC16 (International Particle Accelerator Conference) in South Korea
- Spanish embassy in Tokyo
- ECFA-LC in Santander.

Spain hosted the (ECFA) European Regional LCWS 2016 (very successful)



FRANCE

Marc Winter & Maxim Titov

- IN2P3 ILC budgets : 2017 =(?)= 2016 = 2015 ILC budgets (100 keuros)
too limited to allow for attending the two annual LC workshops
- Irfu (CEA) Budget is also stable, but emerging pressure from other future projects
- ILC likely to remain an explicit activity for some time
IN2P3 : CALICE and CMOS R&D
Irfu : ILCTPC R&D

Remark :

- budget with very low profile
- manpower : steadily diverted on other projects
- physics studies are getting very poorly covered
- National Linear Collider workshop (JCL 2016) Irfu and IN2P3 in March
successful event with ~ 70 participants
- **IEEE NNS/MIC conference in Strasbourg (31/10 - 5/11/16)**
with LC related highlights:
 - . industry exhibit with AAA (10 Japanese companies) + Tohoku region booths
 - . VIP session on large infrastructures with reinforced Japanese and EU representations.
 - . eJADE Industry participation
- France likely to bid to host **LCWS 2017** (Strasbourg or Paris, to be decided)