



FCC news

FCC-ee Collaborations:

-- Detectors: had contact with ILD and SiD spokespersons to follow up on suggestion by some of their members to use these detectors as benchmark for FCC-ee

-- positive answer from Ties Benhke (ILD) ;

+ agreed to share talks at respective meetings

+ collaboration on software via AIDA2.

-- 'no manpower available' from SiD -- except from CERN-CLIC group.

Neither are binding collaborations, so collaborators are free to do as desire

-- many collaborators interested mostly on physics studies for the moment

(FCC-ee detector studies are not yet perceived as critical except for low angle region)

NB: MOU makes sense for several institutes which are not already part of LHC

or for particularly vital theorists

i.e. QED calculations related to luminosity measurement

Bhabha rad.scatt (beam lifetime)

and other obstacles to precision measurements.

FCC news from ICHEP2014 Valencia

- generally the meeting was very much geared up as ILC celebration.
- excellent talks and posters from FCC at various sessions (accelerator and physics)
- FCC definitely on the map of future projects (including electron collider) as described by Swapan Chattopadhyay (session on future accelerators) and Nick Walker (plenary session): although his time scales (ILC 2028, FCC 2038) are somewhat «ILC-optimistic» he clearly acknowledged that ‘physics should decide’ and that for lower energies such as 250 GeV, circular collider e^+e^- is clearly better.
- **ICFA meeting** reiterated support for the ILC but also that “ICFA continues to encourage international studies of circular colliders, with an ultimate goal of proton-proton collisions at energies much higher than those of the LHC”. (Which is meant as support both for IHEP’s CepC+CppC and CERN FCCs)
- my (personal) reading of the situation (from discussions with Japanese colleagues)
 - Japan will keep ILC option open until results from LHC come out in 2-3 years from now.
 - HyperK process likely to be on hold until then, although collaboration is preparing actively

Comments on Higgs Hunting 2014

- Overview of Tevatron direct and indirect constraints on Higgs, P. Grannis (Stony Brook)
 - Impressive to still see new results, more to come
- Indirect experimental constraints (in particular from rare and B decays), F. Teubert (CERN)
 - No signs of new physics, but do not give up hope
- Higgs and naturalness: is it the right question?, G. Villadoro (ICTP Trieste)
 - No signs of new physics, need experimental input
- Future Lepton linear colliders, M. Harrison (BNL)
 - Focus on ILC
 - Japanese science council has time until 2016 to answer
 - Scientific significance of the research using ILC, and the positioning of ILC project in the context of particle physics.
 - Positioning of ILC project in the context of overall scientific activity in Japan
 - Significance of hosting ILC for Japanese people and society
 - Current state and preparation of ILC project, including securement of budget and manpower for construction and operation of ILC

Comments on Higgs Hunting 2014

- FCC-ee as Higgs factory, J. Wenninger (CERN)
 - Clearly seen as a very interesting option
- FCC-hh, D. Schulte (CERN)
 - Concern about cost of FCC-hh
 - Question L. Maiani: What is different from SSC? Answer: SSC has focused on risk reduction and let the cost go up. LHC has proven that one can risk more.
- Future machines potential (theory), J. Wells (Ann Arbor)
 - Higgs related physics case for FCC-hh?
 - Uncertainty on comparison of FCC-ee numbers to linear colliders
 - No clear requirement on integrated luminosities
 - Suggested criterion: What are the largest coupling deviations away from the SM Higgs couplings that are possible if no other state directly related to EWSB (another Higgs, or “rho meson”) is directly accessible at the LHC.

The first FCC international collaboration board meeting is taking place on the 9th and 10th September.

The 8th FCC-ee Physics Workshop will take place on the 27-29 October in Paris

the Pisa group has volunteered to organize the 9th one at the beginning of 2015.

A general FCC Workshop is being considered for April next year.

AND....

http://twitter.com/TLEP_FCCee