News

FCC week in Berlin, CDR, what next.



Workshops/Conferences (First half of 2017)

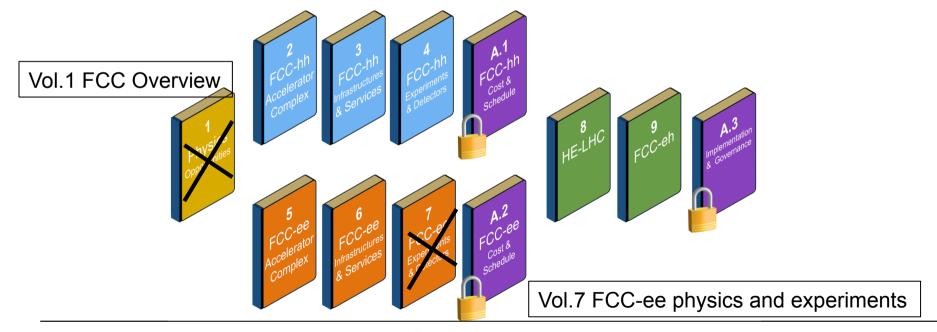
- FCC physics workshop at CERN (16-20 January 2017)
 - https://indico.cern.ch/event/550509/
 - A success: 200 participants.
 - Started to look systematically at complementarities/synergies between the FCCs
 - See Alain Blondel's slides at the end of the workshop
- FCC-ee MDI workshop (16-27 January 2017)
 - https://indico.cern.ch/event/596695/
 - A success: several issues tackled and understood
 - See summary from Manuela Boscolo today
- FCC week 2017 in Berlin (29 May-2 June 2017)
 - https://indico.cern.ch/event/556692/
 - Early fees deadline postponed until 5 February 2017.
 - 241 participants so far: Register!
 - Preliminary timetable <u>here</u>
- EPS-HEP2017 in Venice (5-12 July 2017): http://eps-hep2017.eu/
 - Abstract submission open, deadline 15 April: FCC-ee must be represented well.

The FCC week 2017 in Berlin

- □ The FCC week will give the opportunity to the FCC AB (*) to review us
 - ◆ AB = Advisory Board, chair: Günther Dissertori
 - Members (Physics and Experiments)
 - → Andrew Parker, Marcella Diemoz, Chris Quigg, Gregor Herten, Andrei Golutvin
 - Slight change in format and scope since the FCC week in Rome
 - Substantial fraction of the time devoted to review talks for the Advisory Board
- We have three "Experiments and Detector" sessions on Tuesday
 - ♦ 8:30am → 10:00am
 - 10:30am → 12:00pm
 - 1:30pm → 3:00pm
 - Will use all three them for "AB reviews"
 - Proposed agenda in the next slides
 - We have also one morning of "Physics" reviews on Wednesday
 - Emphasize the complementarity / synergies of the FCC physics programme
 - → Agenda to be proposed by Michelangelo, Christophe, and Matthew

Plenary talks on Monday

- Keynote talk (9am, 50')
 - Will be an overview of the physics programme of the FCC
 - On the basis of the FCC physics workshop summary (synergy/complementarity)
 - Speaker being chosen among the workshop participants
- □ Experiments & Detectors (4pm, 4o')
 - ◆ Should present the outline of our CDR volume (Vol. 7) to the FCC AB
 - As well as the physics content



CDR Vol. 7: Physics and experiments

The European Strategy update will be approved in May 2020

- ◆ European strategy meeting at the end of 2019, CDR distributed Spring 2019
 - CDR ready for print at the end of 2018.

Proposed timeline

- Detailed outline of each chapter ready in Authorea by Spring 2017
- First complete draft of each chapter ready by Spring 2018
- Reviews in Summer and beginning of Fall 2018
- Final version delivered at the end of 2018

Constraint on the length?

- A priori no constraint
 - Will be as short as possible, but not shorter

Plan participation to Vol. 1 (FCC overview)

Global fits, synergies, executive summary

CDR Outline

The outline and the FCC week reviews will follow our group structure

- Introduction (running plan, history, motivation, ...)
- Electroweak physics with Z's and W's
- Higgs physics
- Top quark physics
- QCD and γγ
- Flavours
- BSM (Physics behind precision, global fits, direct searches)
- MDI
- Polarization and beam energy measurement
- Detector designs (with luminosity measurement)
- Summary and outlook
 - Each of the "physics" sections should contain
 - **→** The theory counterpart (e.g., the quest for precision calculations)
 - → The requirements on detectors (geometry, acceptance, resolution, tolerances)
 - → The requirements on accelerator (luminosity, polarization, E_{beam} knowledge)
 - The editors for each chapter are the corresponding 2 (3) group conveners
 - → Participate! We need your commitment until the end of 2018

CDR technicalities

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We plan to work with Authorea (pending CERN's decision)

- CERN is now on the verge of taking a decision about collaborative editors
 - Dodoc, Overleaf, Authorea have been evaluated in 2016
- Chapters were already created in Authorea back in 2012
 - Will be revived to work with the newest Authorea version
- We foresee an Authorea hands-on tutorial in the coming months

Plan of work for 2017-2018

- Being prepared in the coming weeks
 - Aspects that need an intensified focus and dedication
 - Detector design
 - → CLIC-like, FCC-ee tuned
 - Detector magnet
 - Machine-Detector interface (on the detector side)
 - Detector simulation
 - Simulated (fast/full) dedicated physics studies
 - Synergies with FCC-hh
 - Theoretical calculations
 - ...
 - And of course the writing of CDR sections
 - Lots of opportunities for you to engage in the FCC-ee effort
 - Contact Alain, Christophe, Matthew, or myself