

# 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 [here](#)
- ❑ **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, 40')**
  - ◆ 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  $\gamma\gamma$
  - ◆ 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,  $E_{\text{beam}}$  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

- **Proposed timeline**
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  - ◆ First complete draft of each chapter ready by Spring 2018
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  - ◆ Final version delivered at the end of 2018
  
- **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