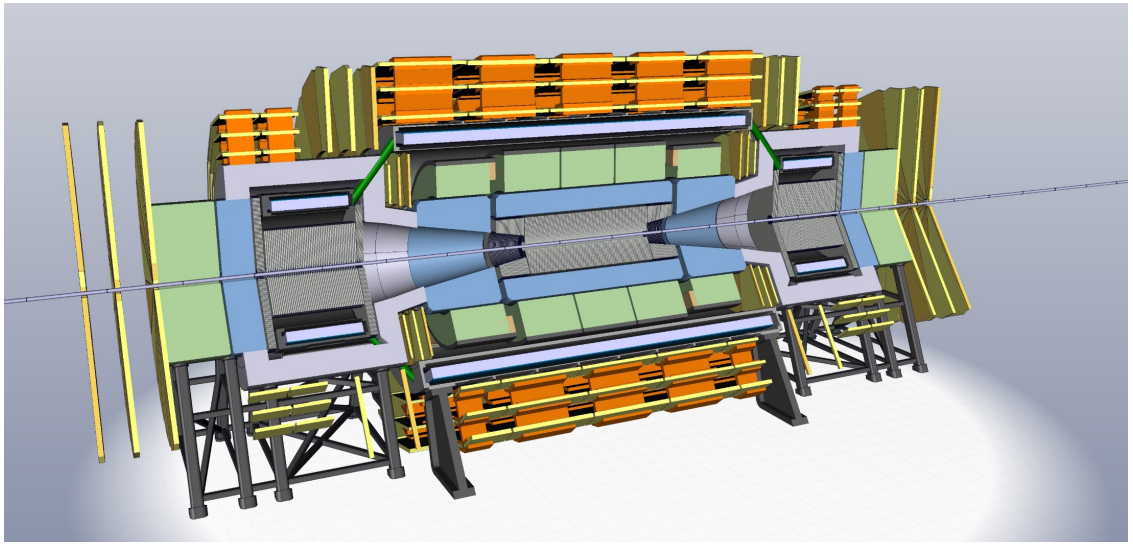
FCC-hh physics analysis

Introduction & News

Heather Gray, Filip Moortgat



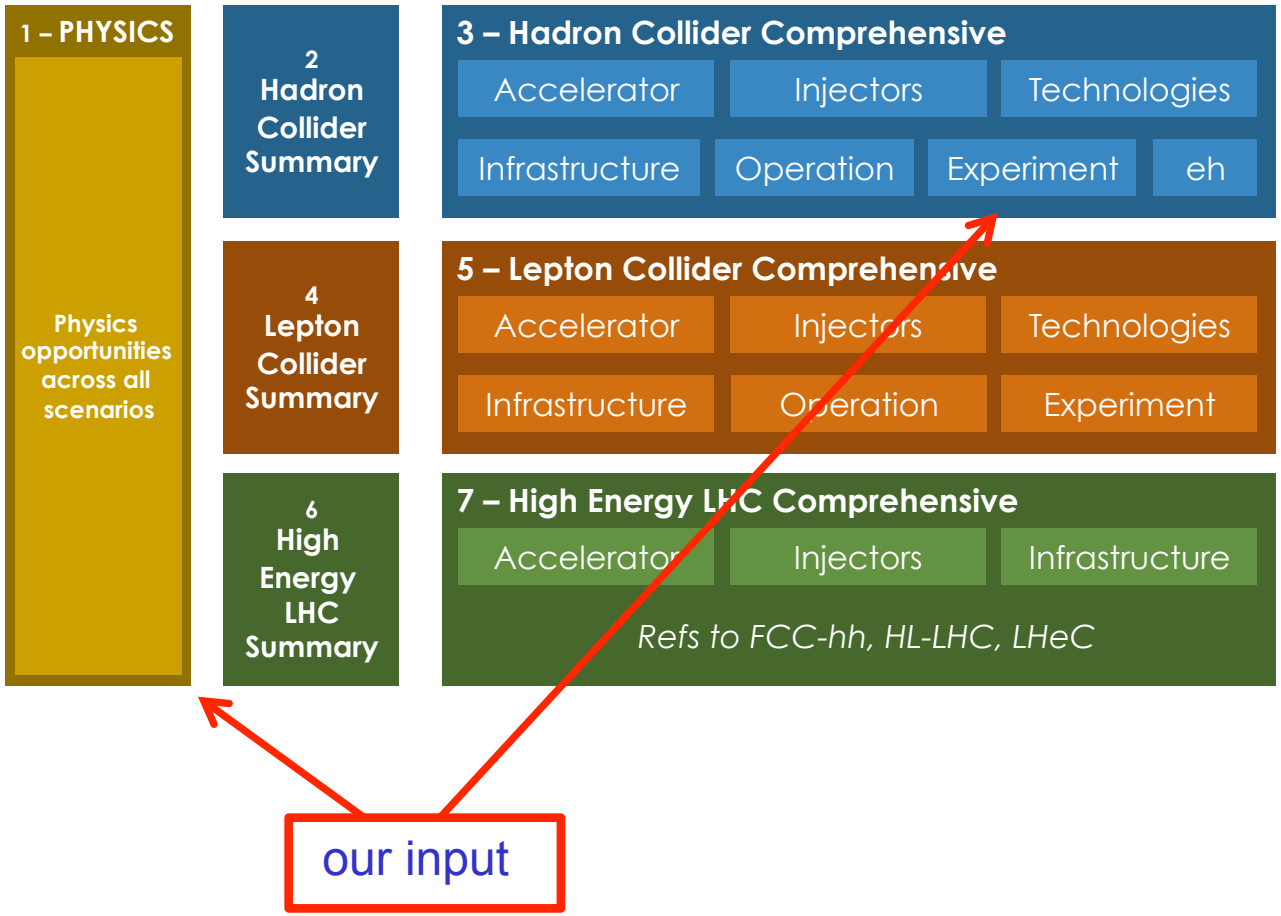
Reminder

This is an informal meeting to discuss FCC-hh physics analysis studies aimed towards the CDR in 2018. Please don't hesitate to contact us if you have anything you'd like to discuss.

How to get started on 100 TeV Physics studies?

- Pick a topic from the list of 100 TeV Physics Benchmarks (link)
- Follow the FCC Pythia + Delphes + Heppy tutorial (Michele Selvaggi)
- Check the MC event database (Clement Helsens)
- Keep us informed about your plans & progress

CDR 2018



- **Required for end 2018, as input for European Strategy Update**
- **Common physics summary volume**
- **Three detailed volumes FCChh, FCCee, HE-LHC**
- **Three summary volumes FCChh, FCCee, HE-LHC**

CDR timescale

FCC-hh summary volume (100-200 pages) (summary volume of hadron machine, detector, infrastructure)
==========

Detector and Experiment: 20-30 pages summary (written by ONE volunteer from our group)

End 2017: content list
April 9-13 2018: FCC week Amsterdam
May 2018: submission of Version0 to advisory committee
Sept. 2018: final editing
November 22nd: Publication

FCC-hh comprehensive CDR volume "Experiments and Detectors"
==========

In order to allow referencing from the summary volume to the detailed report and since there have to be some final plots and results in this summary report we need this detailed report on a similar timescale, i.e.

End 2017: Table of content !!
April FCC week: Key results for the summary report and frozen structure that can be referenced.
June 30th 2018: Final draft
November 22nd 2018: Publication

Werner Riegler

For your agenda

Today's agenda

16:00 → 16:10 **Introduction**

Speakers: Filip Moortgat (CERN) , Heather Gray (LBNL)

16:10 → 16:30 **Searching for stops at 100 TeV**

Speaker: Loukas Gouskos (Univ. of California Santa Barbara (US))

16:30 → 16:50 **Search for sphalerons**

Speaker: Simone Amoroso (CERN)