

Join Software Physics Performance meeting

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Report



Midterm report

Available on new CDS to all CERN users

Final Feasibility Study Report

- First draft to be ready by the end of the year (for the SPC)
 - Draft v0 for internal PED review by 30th of September!
 - analysis note drafts ready by early September
- The Final Report will be an official document, public and submitted to the Strategy

Notes



- "Common Sense" Policy on publication of FCC related results:

- If it includes MC data and tools and statistics from the FCC-ee. And it has FCC-ee in the title (!)
- Have a detailed FCC Note posted as well as the draft paper version in CDS, and a presentation (or more) at the Physics Performance meeting.
- We will define a reviewers for a speedy decision on submission.
- Several Notes still hanging there since a few months...would like to get them published.

Upcoming events



Higgs/Top FCC meeting, June 4th

- https://indico.cern.ch/event/1410813/

FCC Week 2024, 10-14 June, San Francisco

- https://indico.cern.ch/event/1298458

Upcoming events



ICHEP, 18-24 July, Prague

- https://indico.cern.ch/event/1291157/
- Many talks and posters:
 - Flavor and tau physics @FCC (Aidan Wiederhold)
 - Higgs physics opportunities at the FCC (Giovanni Marchiori)
 - High precision QCD and Physics at the FCC
 - BSM PHysics and HNL at the FCC (Nicolo Valle)
 - Electroweak Precision Physics at the FCC
 - Poster on Higgs mass/ZH cross-section of 240+365 GeV (Gregorio B, Ang. L, Kevin D, Jan E.)
 - Poster on Leptofilic Z' bosons at the FCC

ECFA workshop on EWK factories, 9-11 October, Paris

https://indico.cern.ch/event/1399276/

2nd FCC Italy-France Workshop, 4-6 November, Venice

- https://agenda.infn.it/event/37960/

Open call for speakers



- BEACH'24 (Charleston, SC): June, 2024:
 - Heavy-quark physics at FCC
- ICHEP'24 (Prague) July 2024:
 - Electroweak precision measurements at the FCC
 - High-precision QCD physics at FCC-ee
- ICNFP 2024, Aug. Crete:
 - FCC talks(s)on physics/detectors

Physics Performance Sessions at the FCC Week in SF

Talk Description	Duration	Potential Speakers
Introductory talk: requirements for Z and Higgs program	20	Michele Selvaggi
Vertexing	15	Lars Rohrig
Tracking (includes displaced tracks and muons)	15	Nicola De Filippis
Taus	15	Marcin Chrzaszcz
Flavor Tagging	15	Andrea Sciandra
Total	80	
Detector Requirements (Session 2)		
Talk Description	Duration	Potential Speakers
Introduction to requirements for BSM program	15	Louise Skinnari
Electrons & Photons	15	Chris Tully
PID, strange tagging, timing	15	XunWu Zuo
Hadronic resolution (+hermeticiy?)	15	Daniel Elvira
ML for detector geometry and reco optimization	15	Dolores Garcia

Agenda for today



14:00 → 14:10	News Speakers: Emmanuel Francois Perez (CERN), Michele Selvaggi (CERN), Patrizia Azzi (INFN Padova (IT))
14:10 → 14:30	Summary of QCD-Higgs mini-workshop Speaker: Pier Francesco Monni (CERN)
14:30 → 14:50	Jet Flavour Tagging at FCC-ee with a Transformer-based Neural Network: DeepJetTransformer Speaker: Eduardo Ploerer (UZH/VUB)
14:50 → 15:10	Initial studies on tau polarisation Speakers: Maria Cepeda (CIEMAT), Dolores Garcia (CERN)
15:10 → 15:30	Initial studies for Muon detector requirements Speaker: Mahmoud Ali (FCC)
15:30 → 15:50	News from Software Speaker: Gerardo Ganis (CERN)
15:50 → 16:10	Update on ALEPH data in Key4hep Speakers: Jacopo Fanini (Politecnico di Milano (IT)), Jacopo Fanini
16:10 → 16:30	Estimating the computing resource needs for the FSR and beyond Speaker: Gerardo Ganis (CERN)