WG1-PREC "Precision in theory and experiment"

MiniWorkshop

"Parametric uncertainties at future ee colliders: α_{em} "

Thursday 14 July 2022

Paolo Azzurri (INFN Pisa), Ayres Freitas (Univ. Pittsburgh), Adrian Irles (IFIC CSIC/UV), Andreas B. Meyer (DESY)

ECFA Higgs Factory Working Group WG1 on Physics Potential

ECFA Higgs/EW/Top Factory Workshop

Kick-off meeting in June 2021: https://indico.cern.ch/event/1033941/contributions/4342858/

Aim: ...bring together the efforts of various e+e- projects, to share challenges and expertise, to explore synergies and to respond coherently to this high-priority strategy item.

- foster collaboration across projects
- between experimentalists and theorists
- facilitate entry for "newcomers"

Timeframe: May 2021 – December 2023

Checkpoints:

- community-wide plenary ECFA workshops in 2022 and 2023 final "ECFA report"
- Next meeting: 5 7 October 2022 at DESY https://indico.desy.de/event/33640/timetable/#all

Between the big events: organize smaller events, e.g. miniworkshops and seminars

ECFA Higgs Factory Study - WG1 Physics Potential

Subgroup WG1-PREC "Precision in theory and experiment"

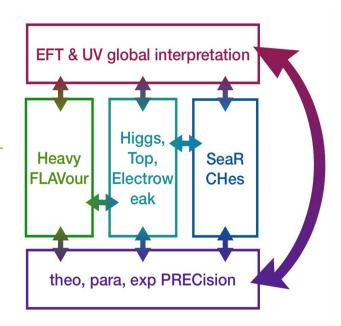
- One of the five subgroups of ECFA-WHF-WG1
- Addressing very high-precision observables

Topics:

- Precision calculations and theoretical, parametric uncertainties α_S,, m and Γ for W, Z, H, t
- Experimental syst. uncertainties, together with WG2 and WG3

Interplay:

- Other WG1 subgroups, in particular HTE, FLAV, and GLOB
- Interface with WG2 for object performance, generator and simulation for high-precision measurements



Recent events (very incomplete list)

Tuesday 8 March

WG1-PREC MiniWorkshop: "Measurements at very high precision at future ee colliders" https://indico.cern.ch/event/1129966/

Thursday 10 March:

WG1-PREC MiniWorkshop: "Parametric uncertainties at future ee colliders: α_s" https://indico.cern.ch/event/1131344/

7-17 June:

Oganized by CERN: Precision calculations for future e+e- colliders: targets and tools https://indico.cern.ch/event/1140580/.

Links

Email list

For future WG1-PREC events, please subscribe here, and/or forward the link to interested colleagues: http://simba3.web.cern.ch/simba3/SelfSubscription.aspx?groupName=ecfa-whf-wg1-prec (this link and email list also works for non-cern accounts)

WG1 portal page on indico

https://indico.cern.ch/event/1044297/page/23971-wg1-group-activities

WG1 seminars and events

https://indico.cern.ch/category/14055/

WG1 twiki page (being formed)

https://twiki.cern.ch/twiki/bin/view/ECFA/ECFAHiggsFactoryWG1