MiniWorkshop: High-Precision Measurements

Thursday 10 March 2022

Introduction

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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”**

Between the workshops: **organize smaller events**

- workshops
- 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 - $\alpha_S$, $\Delta \alpha$, $m_H$, $m_Z$, $m_W$, $m_t$, $m_b$, etc
- Experimental syst. uncertainties

Interplay:
- Other WG1 subgroups, in particular HTE, FLAV, and GLOB
- Interface with WG2 for object performance, generator and simulation for high-precision measurements
This week: two small kick-off MiniWorkshop meetings

Last Tuesday 3-5:30pm CET:
“Measurements at very high precision at future ee colliders”
https://indico.cern.ch/event/1129966/

Today 3-5:30pm CET:
“Parametric uncertainties at future ee colliders: $\alpha_s$”
https://indico.cern.ch/event/1131344/

Near Future
work in progress, stay tuned!
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