

HL/HE-LHC Physics Workshop

M.L.Mangano, CERN TH, on behalf of the steering committee

To join the workshop mailing list, click [here](#)

Mandated by CERN management and LHCC

Steering committee

exptl contacts nominated by expts

LPCC: M.Mangano

TH: G.Salam

ALICE: A.Dainese

ATLAS: A.Nisati

CMS: A.Meyer

LHCb: M.Vesterinen

Working groups

1 convener/expt (nominated by expts)

1-2 TH conveners

SM

Higgs

BSM

Flavour

Heavy Ions

Work plan (*slightly different for Heavy Ions, not discussed here*)

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- Document outcome in a Yellow Report (including both HL and HE), by end of 2018 => submit to European Strategy Review

The kickoff meeting, Oct 30 - Nov 1 2017

Workshop on the physics of HL-LHC, and perspectives at HE-LHC

from 30 October 2017 to 1 November 2017

Europe/Zurich timezone



Overview

Timetable

Logistics (housing etc)

Registration

Participant List

Call for Abstracts

This is the kickoff event for a series of meetings, running throughout 2018, with plenary events and intermediate periods of working group activities.

The main goal of the Workshop is to review, extend and further refine our understanding of the physics potential of the High Luminosity LHC.

The workshop aims to stimulate new ideas for measurements and observables, to extend the LHC discovery reach, to improve the modeling of LHC phenomena towards measurements at ultimate precision, and to prepare to exploit the HL-LHC data to the fullest possible extent.

The Workshop will also provide the opportunity to begin a more systematic study of physics at the HE-LHC, a new pp collider in the LHC ring with CM energy in the range of 27 TeV.

Contact for administrative assistance

 [hllhc-physics.support@c...](mailto:hllhc-physics.support@cern.ch)

<https://indico.cern.ch/event/647676/>

To join the workshop mailing list, click [here](#)

Meetings' plan

- Kickoff mtg (Oct 30 - Nov 1)
 - 1 day overview and WG introduction
 - 1.5 day WG parallel session mtgs
 - 0.5 day WG summaries
- WG mtgs during 2018
- One or two plenary mtgs through 2018 (eg late Spring and Fall, before YR completion)

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with occasional overlap/synergy with other WGs

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 - boosted objects modeling, ...

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- global assessment of significance of possible SM deviations (EFT constraints, SUSY constraints, ...)

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- Discussion with the TH HXSWG conveners has started to ensure coordination etc.

other remarks

- Authorship is open to all individual contributors; the Higgs chapter will appear as an individual arXiv document and submission to the European Strategy review, and will then be bound in a single YR volume with the other chapters
- Agreed with expt's to use a common Delphes framework for simulations, when needed (this is mandatory for HE-LHC, and desirable for HL-LHC, due to limited computing bandwidth for simulations by ATLAS/CMS)