

Report from Physics Coordinator

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Sep. 14, 2016

Support Document that follows up the ICFA letter

First authors' meeting held on Sep. 9

Discussed the structure and basic ideas about contents together with how to share the writing

The ILC's Potential for Discovering New Particles

Document Supporting the ICFA Response Letter to the ILC Advisory Panel

The purpose of this document is to provide in-depths material supporting statements on the ILC's discovery potential for new particles sketched out in the answer of ICFA to the ILC Advisory Panel of MEXT, taking into account LHC Run II development.

- Target: Particle physicists (a version for the MEXT ILC Advisory Panel will be prepared based on this)
- Length: 25 - 30 pages
- Deadline: originally the end of summer 2016, but since X750 is gone and no immediate action seems to be expected, we could postpone it a little bit. Maybe a first presentable draft by the Morioka WS.

Guideline:

1. Minimize overlap with the ILC physics case update document from last year. → focus should be on the ILC's new particle discovery potential and the relation to LHC (and others like direct/indirect detection, flavor, neutrinos, ... where appropriate). Nevertheless, we recapitulates the major points of precision Higgs and top studies from the BSM points of view.
2. We will hand this document to ICFA who will decide how to use it best in the political process.
3. Assign two main authors responsible for each subsection, who will then be in charge of organizing smaller contributions (e.g. subsubsections) etc.
4. Of course every author, as well as the whole LCC Physics Group will have the opportunity to comment on and give input to the whole document.

Physics focus schedule

- Sep 14: Higgs/EW: **today**
- Sep 21: **General ILD Meeting**
- Oct 5: BSM
- Oct 19: Top/QCD

Clarification:

Software talks (organised by Frank&Akiya) will come in addition, as well as the overall software and physics coordination updates in the beginning of each meeting.

Subgroup meetings

Aug. 31: first Higgs/EW group meeting → Report by Junping