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# *LHC / LC Study Group meeting – Introduction*

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CERN, 11/2004



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# First LHC / LC Study Group report: *hep-ph/0410364*

hep-ph/0410364

## Physics Interplay of the LHC and the ILC

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122 authors from  
75 institutions,  
472 pages

## Next steps:

- Submission as CERN Yellow Report
- Submission to *Physics Reports*

# *Work doesn't stop with the completion of our first report*

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- LHC / ILC interplay is a very rich field, we have only scratched the surface so far  
The first report contains many ideas for possible LHC / ILC interplay that need to be worked out in detailed studies
- As input for studying LHC / ILC synergy we need detailed information on how well LHC and ILC can measure wide variety of observables in different scenarios  
⇒ make use of the many new results that will come out of the ongoing ATLAS, CMS and ILC physics studies (full simulations, new scenarios)

# **LHC ⊗ ILC analyses**

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- Many of the analyses so far were mainly LHC analyses where at the very end some ILC input was injected (or the other way round)

Aim should be LHC / ILC analyses that make use of the interplay from the start

- ⇒ Need to build up framework for coherent LHC / ILC analyses to maximise physics benefit from both machines

## ***Dates for the diary***

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- Les Houches Workshop: Physics at TeV Colliders  
Meeting: May 2–20, 2005
- Snowmass Workshop: August 14–27, 2005
- Next LHC / LC Study Group meeting: *date to be fixed*

# ***LHC / LC or LHC / ILC?***

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Should we call ourselves LHC / ILC Study Group from now on?