

# The ILC Report to Snowmass

M. E. Peskin  
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Everything that you would like to know about the ILC – and more – is reviewed in the [ILC Snowmass white paper](#)

[arXiv:2203.07622](#)

This report covers the all aspect of the ILC. Most chapters deal with the general case for an e<sup>+</sup>e<sup>-</sup> Higgs factory as the next collider.

I encourage you to endorse this report. Please visit

<https://agenda.linearcollider.org/event/9135/>

There are **506** signatories as of today.

## Chapters 1, 2

general introduction, crisp statement of physics case

## Chapter 3

ILC organization, status of ILC in Japan

## Chapter 5

introduction to  $e^+e^-$  experimentation

## Chapter 4

accelerator design  
“Green ILC”  
R&D to construction  
future of superconducting RF

## Chapter 6, 7

detectors - ILD, SiD and other possible  
technologies  
simulation framework (full simulation)

## Chapters 8, 9,10

physics studies and projected errors, most from full-sim analyses

## Chapter 11

ILC fixed target and beam dump program

## Chapter 12

SMEFT interpretation, framework for “model-independent” width

## Chapter 13, 14

theoretical interpretation:

“Big Questions”, comparison with models

## Chapter 15

future of the ILC lab

future colliders in the ILC tunnel