

FCC-ee Interaction Region Layout

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The Interaction Region of the FCC-ee is an interesting part of the accelerator.

The design has to span beam energies from 45 GeV (Z running) to 175 GeV (top running).

The beam currents range from 6.6 mA at the top mass to 1.45 A at the Z.

Synchrotron radiation from the beam is both a detector background as well as being capable of damaging and even destroying machine and detector components.

I present here a very preliminary IR design that attempts to span the entire range of beam energies and currents with emphasis on SR issues.

There are many open questions in this design and we list some of them in the summary that need further attention.

The attempt here is to generate discussion about an IR design and to get further input from both the detector and machine groups concerning necessary constraints as well as needs.

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