



Contribution ID: 5

Type: **Talks**

## The ILC/CLIC common issues for the positron sources

*Tuesday, 23 June 2009 12:00 (30 minutes)*

For unpolarized  $e^+$ , the ILC is developing the conventional source, as the auxiliary source while CLIC is developing, as its baseline, an hybrid target source composed of a crystal-radiator, where the channeling process takes place, followed by an amorphous target where positrons are generated.

For polarized  $e^+$ , the ILC study considers the Undulator option as the baseline while the Compton schemes are alternative options. The CLIC study considers the Compton schemes as the baseline while the Undulator is an alternative option.

Independently of the options, many common issues need a careful study: thermal and mechanical effects in the  $e^+$  targets, capture systems (Adiabatic Matching Devices and RF systems), remote handling, (pre)damping rings acceptance, reliability, cost estimate, ...

In November 2008, an "ILC/CLIC  $e^+$  generation" working group was set-up at Chicago, in order to develop the synergy between the ILC and CLIC  $e^+$  studies.

A review of the common technical issues and studies will be presented including the existing technical and tests facilities where further tests could be performed.

**Primary author:** RINOLFI, Louis (CERN)

**Presenter:** RINOLFI, Louis (CERN)

**Session Classification:** Physics Case & ILC/CLIC Common issues

**Track Classification:** Talks