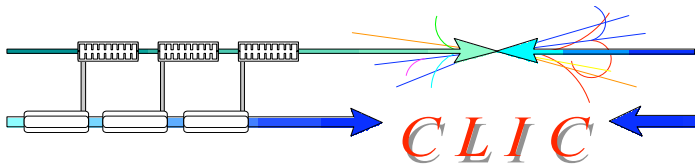


Proposal for future Webex meetings on ILC/CLIC e^+ studies

L. Rinolfi

Possible start in January 2009



A new ILC/CLIC working group called "e⁺ generation"

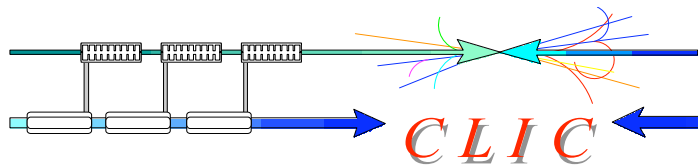
has been officially set-up at University of Illinois Chicago - UIC
during ILC08 workshop: 15th - 20th November 2008

ILC convener: Jim Clarke

CLIC convener: Louis Rinolfi

http://clic-study.web.cern.ch/CLIC-Study/CLIC_ILC_Collab_Mtg/Index.htm

with the following mandate (see next slide)



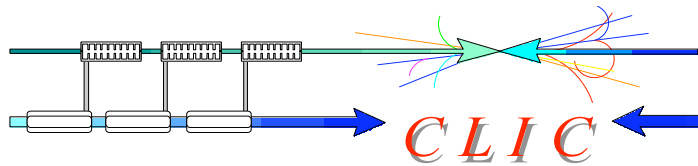
Mandate of the working group



The ILC study considers the Undulator option as the base line while the Compton schemes are alternative options. The CLIC study considers the Compton schemes as the base lines while the Undulator is an alternative option. Additionally, both projects are interested in the development of conventional sources (ILC as an auxiliary source and CLIC as an alternative baseline).

The working group should:

- Develop the synergy between the ILC and CLIC e^+ studies.
- Evaluate the common technical issues related to both options for the production of polarized positrons.
- Consider other alternatives such as ERL, Linac-Compton and conventional sources
- Prioritize R&D.
- Review the existing technical and tests facilities where further tests could be performed.
- Evaluate where cost savings could be obtained.
- Promote common meetings and workshops.



Proposal for a name



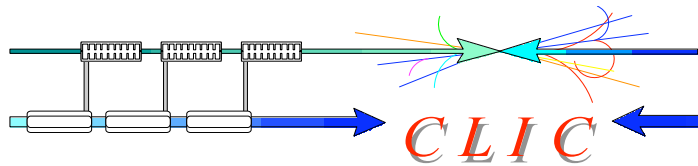
The name of our present Webex meeting :

"Euro-Japan Compton capture and stacking"

could be changed to

"CLIC/ILC e^+ studies"

Coordinator of the Webex meeting: T. Omori / KEK

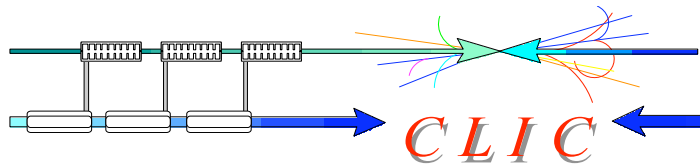


Institutes and tests facilities



Alphabetic order:

- BINP: Li lens, window tests, liquid Li and Pb targets
- CERN: NA63 experiment
- CsrTA: Li lens for positron beam
- Cockcroft Institute (Daresbury): Positron target tests
- KEK: ATF and KEKB e^+ source
- LAL: Optical cavity



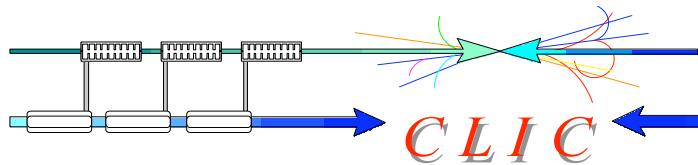
Proposal for a larger mailing list



Propose to include people working with Positron sources from these laboratories:

ANL	BINP	BNL	CERN	CI	Cornell
DESY			Durham	Hiroshima U	
IPNL		KEK	LAL	LLNL	
LNF		NSC-KIPT	STFC	

This list of these laboratories and the detailed list of names to be discussed



Proposal to present studies about



For the short-term plan 2008 - mid-2009

Undulator-based source

Develop Geant4 model of collimator, target, capture optics, and capture RF assembly.
Optimise parameters wrt yield, polarisation and cost.
Consider timing constraints issues and upgrade paths.
Consider electron beam quality issues.

Compton source

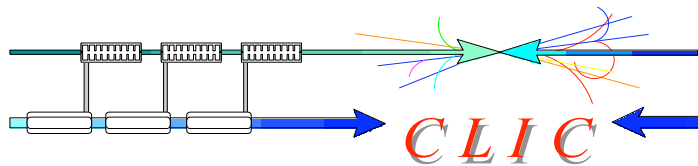
Design of the Compton ring.
Optical stacking cavity.
High power lasers.
Stacking simulations.

Lithium lens capture optics

Evaluate suitability for Undulator and Compton schemes.

Conventional sources (Conventional targets and hybrid targets)

Simulations to optimize the unpolarized e^+ yield.
Evaluate the applicability of the Li lens.
Evaluate window, liquid Pb target, 300 Hz generation



Proposal for a date of the week



The present Webex meeting takes place roughly once a month :

A proposal is to fix a day which is convenient for most of us:

"First Thursday or Friday of the month"

Or

"First or second Thursday of each month"