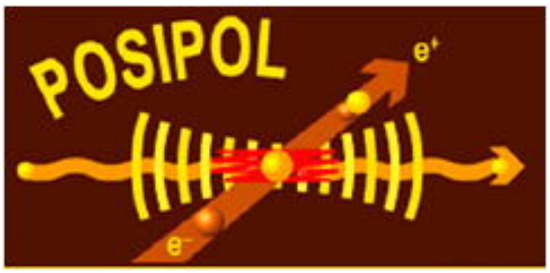

Contribution ID: **17** Type: **Talks**

Lithium Lens Simulation for ILC Positron Source

Friday, 26 June 2009 09:00 (30 minutes)

The Lithium Lens (LL) is one of the possible candidates for positron collection optic elements of an ILC positron source. The collection efficiency of positrons after the conversion target is a key issue of the source design. The LL has been simulated using Geant4-based application (PPS-Sim) that allows to simulate the production of polarized positrons and their tracking in electromagnetic fields. In order to get highest positron yield and polarization, the optimal lens parameters are determined for the base-line ILC positron source. The efficiency of LL is compared with others schemes of positron capture as Adiabatic Matching Device and Quarter Wave Transformer.

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