

Study on Low-Energy Positron Polarimetry

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For the design of the ILC a polarised positron source based on a helical undulator system has been proposed. In order to optimise the positron beam, i.e. to ensure high intensity as well as high degree of polarisation, a measurement of the polarisation close to the positron creation point is envisaged.

In this contribution methods to determine the positron polarisation at low energies are discussed. For a more detailed analysis simulations with an extended version of Geant4, which allows the tracking of polarised particles taking into account the spin effects, are currently performed. A status will be presented.

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