

Hadron free measurement of electron beam polarization

Over the past few decades, polarized electron beams have been actively used in various fields of physics. Mott, Moller, and Compton scattering methods are used to diagnose the polarization of such beams. We propose to use a different method. The high charge densities achieved in electron beams offer the possibility of measuring the polarization by scattering one electron beam off another. Options for self-calibrating the beam are proposed, as well as an option for online polarization measurements.

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