

Design and implementation of a laser Compton polarimeter at BEPCII-U

As a key R&D item of polarized lepton beams for future colliders, a laser Compton polarimeter has been designed for the electron storage ring of BEPCII, reusing the X-ray beamline and experimental hutch of a dismantled wiggler source. This article will describe the design considerations of the Compton polarimeter, report the first phase beamline modification and preliminary beam commissioning results, and discuss potential performance improvements in the near future.

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