

Integrated luminosity measurement at CEPC

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The very forward region of a detector at future e+e- collider is the one of the most challenging regions to instrument. A luminometer – compact calorimeter dedicated for precision measurement of the integrated luminosity at a permille level or better is needed. Here we review a feasibility of such precision at CEPC, considering detector mechanical precision and beam-related requirements. We also discuss capabilities of experimental determination of the beam-energy spread, from the perspective of integrated luminosity precision requirements at the Z0 pole.

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Primary author: SMILJANIC, Ivan (Vinca Institute of Nuclear Sciences, University of Belgrade (RS))

Co-authors: KACAREVIC, Goran (University of Belgrade (RS)); Dr ZHU, Hongbo (IHEP); BOZOVIC-JELISAVIC, Ivanka (University of Belgrade (RS)); ZHU, Kai (Institute of High Energy Physics, China); HOU, Suen (Academia Sinica (TW))

Presenter: SMILJANIC, Ivan (Vinca Institute of Nuclear Sciences, University of Belgrade (RS))

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