



Contribution ID: 219

Type: **Oral presentation (remote)**

Metrology in the integrated luminosity measurement at ILC

Wednesday 10 July 2024 16:40 (20 minutes)

Possibility that the ILD detector might be realized at a future e+e- collider calls for quantification of precision of the integrated luminosity measurement, assuming here the ILC operating scenarios at the Z-pole, 250 GeV, 500 GeV and 1 TeV center-of-mass energies. This is the first comprehensive study of the systematic uncertainties in integrated luminosity measurement at ILC, rising from metrology (detector positioning and alignment, beam properties and delivery to the IP), after the generic estimates given in LC-DET-2005-004.

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Primary authors: Dr SMILJANIC, Ivan (VINCA Institute of Nuclear Sciences, University of Belgrade (RS)); BOZOVIC-JELISAVCIC, Ivanka (University of Belgrade (RS))

Co-author: Dr KACAREVIC, Goran (VINCA Institute of Nuclear Sciences, University of Belgrade (RS))

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

Session Classification: Calorimetry, Muon detectors

Track Classification: Physics and Detector: Calorimetry, Muon