

08 RADIATIVE CORRECTIONS

Monte Carlo generator photon jets used for luminosity at e^+e^- colliders

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摘要

A Monte-Carlo Generator Photon Jets (MCGPJ) to simulate Bhabha scattering as well as production of two charged muons and two photons events is discussed. The theoretical precision of the cross sections with radiative corrections (RC) is estimated to be smaller than 0.2%. The Next Leading Order (NLO) radiative corrections proportional to α are treated exactly, whereas the all logarithmically enhanced contributions, related to photon jets emitted in the collinear region, are taken into account in frame of the Structure Function approach. Numerous tests of the MCGPJ as well as a detailed comparison with other MC generators are presented.

关键词 [luminosity, \$e^+e^-\$, hadrons, detectors](#)

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