INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS
AMSTERDAM 2002

Abstract ID=ABS527
Heavy quark mesons and baryons (incl. lattice calculations)
QCD: Hard interactions
Experiment: L3 Collaboration
Contact Person: Juan Alcaraz
Institute: CERN
Email: Juan.Alcaraz@cern.ch

Inclusive D^* Production in Two-Photon Collisions at LEP

L3 Collaboration

Abstract

Inclusive $\mathrm{D}^{*\pm}$ production in two-photon collisions is studied with the L3 detector at LEP, using 683 pb^{-1} of data collected at centre-of-mass energies from 183 to 208 GeV. Differential cross sections are determined as functions of the transverse momentum and pseudorapidity of the $\mathrm{D}^{*\pm}$ mesons in the kinematic region 1 GeV $< P_T <$ 12 GeV and $|\eta| < 1.4$. The cross sections $\sigma(\mathrm{e^+e^-} \rightarrow \mathrm{e^+e^-D^{*\pm}X})$ in this kinematical region is measured and the $\sigma(\mathrm{e^+e^-} \rightarrow \mathrm{e^+e^-c\bar{c}X})$ cross section is derived. The measurements are compared with next-to-leading order perturbative QCD calculations.

Version 0
Date 2002-04-30 : 16:18:02'