

Luminosity Optimization Using Beam-beam Deflections at LEP, C. BOVET, M. HILDRETH, M. LAMONT, H. SCHMICKLER, J. WENNINGER, CERN - The degree of the overlap of the counter-rotating beams at the interaction points is a critical parameter to obtain high performance at the LEP electron-positron collider. We have measured the deflection of the beams due to the beam-beam interaction using orbit monitors located close to the interaction points. The dependence of the beam-beam deflection on the transverse distance between the beams has been used to optimize the overlap of the beams in the vertical plane and to measure the beam sizes at the interaction points.