

Dynamic Beam Based Calibration of Beam Position Monitors, B. DEHNING, G.-P. FERRI, P. GALBRAITH, G. MUGNAI, M. PLACIDI, F. SONNEMANN, F. TECKER, J. WENNINGER, CERN - The degree of spin polarization at LEP is strongly dependent on the knowledge of the vertical orbit. Quadrupole magnet alignment and beam position monitor offsets are the main source of the orbit uncertainty. The error of the orbit monitor reading can be largely reduced by calibrating the monitor relative to the adjacent quadrupole. 16 beam position monitor offsets can be determined in parallel which takes 40 minutes. The error of the measured offset is about 0.03 mm. During the LEP run 1997, more than 500 measurements were made and used for the optimization of polarization. The method of dynamic beam based calibration will be explained and the results will be shown.