

Beam Based Alignment using the QSBPM System,
P. RÖJSEL, MAX-LAB - The new generation of accelerators becomes more and more dependent on alignment accuracy for reaching their performance goals. The precision of the conventional surveying techniques is no longer sufficient. After the initial alignment whose precision allows an initial beam to pass through the machine. The beam itself is used as the instrument to fine tune the machine alignment. The QSBPM system is especially suitable for this alignment since it measures the beam position relative the quadrupole magnets magnetic centra. Measurements made on the MAX I and MAX II machines as well as a comparison of these measurements to computer simulations of alignment errors is presented.