

ORBIT CONTROL USING BOTH BEAM POSITION MONITOR AND BEAM LOSS MONITOR

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For supplying large amount of particles to physics experiment, an automated beam orbit control system must be driven on accelerator control system. On common sense, orbit is corrected using beam position monitors. But, suitable orbit at which beam loss can be minimized is not correspond to central orbit of beam duct. To correct the beam orbit include such phenomena, not only information of beam position but also more information which can show the relation between beam profile and sections of beam ducts is required. We use a beam loss monitor system for one of the sources of information related to the mismatching between beam duct section and beam profile. So, we think that the coupling of quantitative control of orbit by beam position monitor and check of control state by beam loss monitor have enough power for the automated orbit control. From this point of view, we trying two monitor coupled orbit control system for automated orbit control system. We wish to present the method which still being developped.