

USING THE IBS TO MATCH THE INJECTION LINE OPTICS TO THE MAIN INJECTOR

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Abstract

The Fermilab Main Injector has two Ionization Beam Scanners installed in order to measure the transverse (horizontal and vertical) beam profile. The IBS can measure the beam profile on each turn the beam makes around the machine and thus can look for not only centroid oscillations caused by imperfect injection steering, but also sigma (beam width) oscillations caused by imperfect phase ellipse matching. This presentation will describe plans for the use of this instrument, and, if available, data from this instrument.