Systematic Uncertainty Study (HMS delta)

The dependence of the experimental cross section on spectrometer acceptance was tested by varying the cuts on the quantities $(\delta, x'_{tar}, y'_{tar})$ in each spectrometer. The experimental cross section was then extracted for spectrometer cut variations of \pm 10 % and compared to the one with nominals cuts. In general, the variation of the cross section is small (< 0.5%). However, the value of the cross section at small values of -t depends significantly on the HMS y'_{tar} acceptance. The increased sensitivity at small -t compared to other spectrometer quantities may be attributable to the strong correlation with HMS y'_{tar} .

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