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THE MEASUREMENT OF PROTON-PROTON DIFFERENTIAL CROSS-SECTION IN
THE ANGULAR REGION OF COULOMB SCATTERING AT THE ISR

Addendum to CERN/ISRC/69-20

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The range of scattering angles accepted by the individual detectors, derived from Figs. 3 and 5 of the proposal and for the geometry recently defined in CERN/ISRC/69-53, are :

- 1.7 - 11.3 mrad for the detector in front of the F-magnet
- 1.4 - 1.9 mrad for the detector behind the F-magnet

As discussed at page 7 of the proposal, the inner edge of the detectors is taken to be just outside the limits of the machine aperture, which is larger than the actual beam size . The upper limits of the acceptances are set by the vertical aperture of the vacuum chamber .

In the semi-space where the elastic scattering experiment beyond the Coulomb interference region (CERN-Genova-Torino) takes place , the upper limit of the acceptance of the detector in front of the F-magnet is 2.8 mrad instead of 11.3 mrad .

The detector behind the F-magnet allows the measurement of events at small scattering angles and slightly overlaps the angular range of the other detector .