

INTERSECTING STORAGE RINGS COMMITTEE

ADDENDUM TO

PROPOSAL FOR A DETAILED INVESTIGATION OF LOW-MOMENTUM
PARTICLES EMITTED AT LARGE ANGLES FROM pp COLLISIONS AT THE ISR
CONCERNING SIMPLIFICATION OF VACUUM CHAMBER

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1. As a result of discussions with

a) O. Czyżewski, concerning proposal ISRC/69-37 by the Cracow Emulsion Group, and

b) E. Fischer and R. Calder (ISR) concerning the technical problems associated with the vacuum chamber

we have found that the simplified vacuum chamber satisfying the requirements of the Cracow experiment (ISRC/69-37 Add. 1) can also be used for our experiment if its scope is reduced to some extent.

2. For our experiment this means that - at least in the first stage of the investigation - one concentrates on the pion secondaries with momenta exceeding about 50 MeV/c, on kaons above 120 MeV/c and on protons above 180 MeV/c. In the case of the pions, which are the most important, this means cutting off a momentum band which is weakly populated in any case (see Fig. 1 of original proposal).

3. The simultaneous use of one vacuum chamber for all the proposed emulsion experiments will considerably reduce both the construction effort and the time of occupation of a given interaction region for the emulsion exposure.

4. After evaluation of the results obtained in this first experiment one will be able to decide whether it is justified to build a vacuum chamber with a very thin window to investigate the extreme low-momentum region of the particle spectra.