EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

CERN/ISRC/69-10
12.2.1969

MINUTES OF THE SECOND MEETING OF THE INTERSECTING STORAGE RINGS COMMITTEE HELD ON 11 AND 12 FEBRUARY, 1969

Present:- F. Bonaudi, G. Charpak, H.M. Chan, G. Cocconi, R. Cool, C. Franzinetti, B. Gregory, F. Heymann, W. Jentschke (Chairman), K. Johnsen, E. Lillethun, P. Marin, A. Minten, L. Resegotti, K. Winter.

The ISRC received the following papers:

- Discussion of an experiment at the CERN ISR to determine the low-energy production spectra around 90° of $\pi^{\pm}$, $K^{\pm}$, $\bar{p}$, $\bar{d}$ and resonances with two-body decays, by the Scandinavian ISR Collaboration (ISRC/69-2).
- An ISR proposal to measure particles with large transverse momentum as a search for the intermediate boson, by the Bristol University, Cambridge University, Liverpool University, University College, Westfield College, RHEL Collaboration, (ISRC/69-3).
- A letter of intent by the CERN-Munich Max-Planck group, who proposes to reconstruct complete events in a large magnet system (ISRC/69-4).
- Measurement of the production of stable particles at the ISR, by the CERN/Holland-Lancaster/Manchester Collaboration (ISRC/69-5) and a memorandum by the same group (ISRC/69-9).

The following proposals were discussed at the meeting:

1. Single particle production near 90°. Three groups (The Scandinavian ISR Collaboration; the Bristol, Cambridge, Liverpool, University College, Westfield College, RHEL Collaboration; and the CERN/Holland-Lancaster/Manchester Collaboration) have proposed a measurement of particle production at large angles, though with different aims as to future extensions. Among the experimental apparatus proposed for these measurements, a magnet for momentum analysis, discussed by the Scandinavian Collaboration, would seem to have the widest possibilities for further and more refined experiments.

The proposals on effective mass analysis of secondaries (letter of intent by B. French and A. Minten CERN, 6.12.1968); production of resonances with two-body decays (Scandinavian Collaboration, ISRC/69-2) and a search for intermediate bosons (Bristol, Cambridge, Liverpool, UCL, Westfield College and RHEL, ISRC/69-3) could perhaps be carried out with this magnet.

The ISRC therefore invites one representative from each of these four groups to its next meeting on 18 March, 1969, to discuss the possibility of a common apparatus. In addition, the groups should estimate the amount of technical effort they would expect from CERN for their set-ups as proposed.

2. Single particle production at small and intermediate angles

A proposal by the CERN/Holland-Lancaster/Manchester collaboration (ISRC/69-5) was discussed. A survey of the proposed range of angles and momenta is important during the initial phase of experimentation at the ISR. The technical effort required for this experiment has to be judged in the frame of a more complete experimental programme.

The ISRC discussed the large, general purpose magnet system needed for the reconstruction of complete ISR reactions. Three different systems have been proposed in 1968, which were discussed by a Working Group with the aim of evaluating their relative merits. The ISRC further stressed the importance of a rapid decision on the type of magnet to be built and on the time-schedule for construction.

The next meeting will be held on 18 March, at 2.30 p.m. and will continue on 19 March, at 9 a.m.