

CERN/ISRC/69-35  
23 May, 1969

EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

MINUTES OF THE FIFTH MEETING OF THE  
INTERSECTING STORAGE RINGS COMMITTEE  
HELD ON 20 AND 21 MAY, 1969

CERN LIBRARIES, GENEVA



CM-P00062878

Present:- W. Jentschke (Chairman), M.H. Blewett, F. Bonaudi, H.M. Chan, G. Charpak, G. Cocconi, R.L. Cool, C. Franzinetti, B.P. Gregory, F. Heymann, K. Johnsen, E. Lillethun, P. Marin, A. Minten, L. Resegotti, K. Winter. For part of the time, invited by ISRC: K. Schlüpmann, A.M. Wetherell.

Since the last meeting, the ISRC has received the following papers:

- Addendum to: Study of Interactions in which Gamma-Rays and Electrons with Large Transverse Momentum are Emitted, D.Ph.P.E.-CEN, Saclay, CERN/ISRC/69-11/Add.
- Addendum to:  
The Measurement of Proton-Proton Differential Cross Section in the Angular Region of Coulomb Scattering at the ISR, Physics Laboratory, Istituto Superiore di Sanità and Istituto Nazionale di Fisica Nucleare, Sottosezione Sanità, Rome and CERN, CERN/ISRC/69-20/Add.
- Addendum to: Proposal for a detailed Investigation of Low-Momentum Particles Emitted at Large Angles from pp Collisions at the ISR, CERN-Strasbourg Collaboration, CERN/ISRC/69-6/Add.
- Addendum to: Requirements for Proposed Experiments (Continued) by M.H. Blewett and F. Bonaudi, CERN/ISRC/69-31/Add.
- De l'usage des deutons aux ISR, Ecole Polytechnique Paris, Department Saturne Saclay, CERN/ISRC/69-32.

At the meeting, the following topics were discussed.

1. The minutes of the last meeting were approved.
2. The Large Magnetic Analysis System

In accordance with the proposal of the last meeting, G. Charpak and A. Minten presented a short report on the status of planning for this facility.

Some informal meetings have been held to discuss the problems involved with the use of the split-field magnet concerning possible detection apparatus, requirements for the experiments that may use it, flexibility of insertion or removal of apparatus, and the interaction of these questions with the mechanical design of the magnet. Although the meetings of this working group have been open to all interested in these problems, the ISRC asked Charpak and Minten to circulate a letter outlining the aims and requesting wider collaboration in this working group in order to ensure full participation by all who may be future users or who may be able to contribute to the work connected with these problems. It is important that questions concerning the design of the magnet itself be resolved in the very near future.

Possible types of detectors are still under vigorous discussion. An outline of the possibilities for using proportional chambers was presented by G. Charpak. Since only small-sized units have been used to the present, chambers with dimensions of the order of 1 meter are being studied in order to determine the relative merits with respect to the more classical types of detectors.

When the working group has arrived at some conclusions about these problems, it will present them for wider discussion at an Open Meeting of the ISRC, perhaps early in the Fall.

### 3. Reports on Proposals

- (a) Experiments on Elastic and Inelastic Proton-Proton Scattering at the ISR (ISRC/69-29). A.M. Wetherell gave a short report on this "expression of interest". A full-scale proposal for these experiments should be forthcoming.
- (b) At the request of the ISRC, E. Lillethun reported on some modifications to the proposal by the Scandinavian ISR Collaboration. These modifications and further details on the experiment will be included in an Addendum that is being written.

### 4. Discussion on Proposed Experiments

No firm conclusions concerning the initial experimental programme on the ISR have been reached, as yet, but some preliminary ideas seem to be emerging. Among these are the following.

- (a) The large split-field magnet will be installed at I-4. Its installation will require extensive use of this area during much of the time of early ISR operation prior to the magnet's use. At the same time, testing of possible detection apparatus can proceed in this area but it is unlikely that a full-scale experiment can be set up here because of possible removal before its completion. On the other hand, experiments that can use the facility may benefit from testing equipment nearby and preparing for future use of the magnet.
- (b) Some of the proposed experiments have suggested arrangements of auxiliary equipment that are fairly similar. It is possible that a well-designed facility could be built and installed to serve several users, with minor modifications. In these cases, it would be advantageous if the respective groups could agree on some forms of common apparatus.

G. Cocconi and K. Winter were asked to contact some of these groups in order to explore this possibility.

- (c) The number of interaction regions is limited. It may be possible, in some cases that more than one experiment can be carried out at a given region, if the apparatus can be arranged compatibly. When this is not possible, it is important that experimental equipment be designed for relatively easy removal in order that experiments can use the region in fairly rapid succession, or on an alternating basis.

## 5. Future Meetings

The next (closed) meeting of the ISRC will be held on June 3rd at 2.30 p.m. and on June 4th at 9 a.m. in the AR Conference Room, ISR Bldg.15.

The following meeting is scheduled, tentatively, for July 3rd, at 9 a.m.