EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

CERN/ISRC/70-3

19 February 1970

MINUTES OF THE TENTH MEETING OF THE INTERSECTING STORAGE RINGS COMMITTEE HELD ON FEBRUARY 3 AND 4, 1970

Present: W. Jentschke (Chairman), J. Allaby (part time), M.H. Blewet F. Bonaudi, H.M. Chan, G. Charpak, G. Cocconi, C. Franzinet B.P. Gregory (part time), K. Johnsen, E. Lillethun, A. Mint (part time), L. Resegotti, J.C. Sens, K. Winter.

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

- ISR Background Studies III: Shielding Measurements at the PS, by K.M. Potter, V. Agoritsas, M. Bott-Bodenhausen, B.D. Hyams, CERN/ISRC/69-38 Add. 1.
- Plans for an Experiment to Measure Proton-Proton Correlations at the ISR, by G. Charpak, D. Drijard, H.G. Fischer, A. Minten and F. Sauli, CERN/ISRC/70-1.
- Request for Machine Time for Study of Background Very Close to t PS Beam, by Ist. de Sanità, Rome, and ISR-VA Group, CERN/ISRC/70-

1. Preparations for ISR Experimental Program

a) General Aspects

A general picture of the financial and manpower aspects of the

septum magnets for the small-angle spectrometer at I-2 and is also starting design on the septum magnets to be used at I-6. The special rectifiers needed at I-2 are to be ordered shortly but those for I-6 have not yet been specified.

The counting rooms are in the stage of final design and will be placed on top of the ISR ring as close as possible to the cable openin

Bonaudi showed the Committee a fairly detailed layout of the experiments at region I-2. Further information is required from the groups at the other intersection regions before layouts can be prepare

e) Vacuum Chambers

After a short review of the beam-interaction problems, Johnsen reported that it has already been shown that chambers composed of pipe with transitions between circular and elliptical cross section, or wit top and bottom halves of either shape, are acceptable. He said that it was planned that some more complicated chambers should be ready for insertion in the ISR, after its initial operation with simple pipes at the intersection regions, so that beam tests can be made to determi the effects. Although calculations and other studies are continuing, Johnsen pointed out that a quantitative knowledge of these effects can only be fully determined from the beam itself.

The Committee requested Sens to coordinate the proposals of the experimental groups to determine which designs, possibly intermediate between the simple pipes and the "ideal" designs, would be most suitab to be constructed for early trial in the machine.

f) Preparations of Experimental Groups

The Committee requested Sens to contact the experimental groups for information concerning their preparations and schedules and to summarize this for the next meeting.

years. General budgetary estimates have been made by the various d partments and divisions involved in the program that has been accep by both the ISRC and NPRC, and these estimates appear to fit into t overall CERN plans in a fairly reasonable way.

b) ISR Physics Co-ordinator

The appointment of Dr. J.C. Sens as ISR Co-ordinator, until December 1971, was announced by Gregory. His responsibility will b very similar to that now delegated to the PS Co-ordinator. The Cha of the ISRC welcomed Dr. Sens to the meetings of the Committee.

c) Split-Field Magnet System

Resegotti reported that, on January 15, specifications and dra for the magnet had been sent to firms invited to tender for its con struction. A 1/5-scale model has been built and will be measured a studied in the coming months.

On the detection system, Charpak reported that a module sector of about 1200 wires should be ready about the end of February. Aft studies with this sector, the construction of further modules can p About ten of such modules, comprising some 10.000 wires, would fill top half of the magnet's aperture. Charpak said that he is optimis about the performance of these detectors and that the major problem seem to be mechanical.

d) Other Equipment

Bonaudi reported that, in December, an order for rectifiers fo standard experimental magnets was placed as part of an order from P A similar joint order with the PS for standard bending magnets shou be placed in March. Both of these orders should arrive in time for installation next year.

g) Other

Sens reported that he has been starting to look into the computing needs for the experimental program and will inform the Committee at the next meeting.

On monitoring, Sens said that he had already discussed th problem with some of the experimental groups. The Committee reque him to coordinate the ideas being considered and to report, if pos at the next meeting.

2. Testing at the PS

a) Requests

The ISRC recommends approval of the request by the Ist. di Sa Rome, and the ISR-VA Group (CERN/ISRC/70-2), for testing time at t if there is no serious interference with the machine's performance with the schedule. Allaby was requested to investigate this propo before final recommendation to the NPRC.

b) Future Requests

The Committee noted there had been no response from the exper groups to its request at the last meeting (CERN/ISRC/69-64, item 5 future testing needs at the PS.

Sens said that he would try to obtain some information concer these needs. He felt that they could be classed in two categorie (i) tests of equipment that could be done in a regular test beam, (ii) testing for background or other needs that might require a h energy beam of special design or a special area.

3. Other Business

b) Since it now seems probable that there will be no Open Meeting of the ISRC for some time, it was agreed that the group from the Universities of Bari and Lecce should be invited to present their proposal (CERN/ISRC/69-60) at the next meeting.

c) The Chairman proposed that another visit to the ISR site, and to the S-F magnet model, be planned for the next meeting. It was so agreed.

4. Next Meeting

Provisionally, the next (closed) meeting of the ISRC will be held on Tuesday, May 5, 1970 at 2:30 p.m. and Wednesday, May 6, 1970, at 9:00 a.m.