



CM-P00063330

EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

22 January, 1971

MINUTES OF THE SIXTEENTH MEETING OF THE
INTERSECTING STORAGE RINGS COMMITTEE
HELD ON JANUARY 20, 1971.

CLOSED SESSION

Present: B.P. Gregory (Chairman), M.H. Blewett, F. Bonaudi,
G. Charpak, C. Franzinetti, F.F. Heymann, W. Jentschke,
K. Johnsen, E. Lillethun, P. Marin, A. Minten,
L. Resegotti, H. Schopper, J.C. Sens, J. Steinberger,
K. Winter.

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

- Memorandum on Search for Quarks at the ISR, from the Saclay-Strasbourg Collaboration, CERN-ISRC/69-11 Add. 5.
- Memorandum on Luminosity and Background Measurements in I-4, from the Working Party, CERN-ISRC/70-26 Add. 1.
- A Proposal to Search for Fractionally Charged or Massive Particles at the ISR, by the Bologna-CERN Collaboration, CERN-ISRC/70-31.
- A Search for Fractionally Charged Particles in Water Irradiated at the Intersecting Storage Rings, by G. von Dardel and S. Henning, University of Lund, CERN-ISRC/70-33.
- Memorandum from the Subcommittee to Study the Status of the "Quark Search at ISR", CERN-ISRC/71-2.
- Memorandum on Status Report of the Pisa-Stony Brook ISR Experiment, from the Pisa-Stony Brook Collaboration, CERN-ISRC/71-3.
- Programme of Accepted Experiments, CERN Intersecting Storage Rings, CISR/EXP/1.

attached /

1. The Minutes of the Fifteenth Meeting of the ISRC were approved.

2. Review of Status of the ISR
K. Johnsen gave a short review of the beam tests that had been performed with ISR Ring I on January 11, 12 and 13. The ISRC was particularly pleased to hear of the success in producing beams of up to 3 A, with loss rates as low as 10^{-3} min^{-1} in this ring. However, Johnsen pointed out that there were still puzzling effects that may be difficult to overcome and stressed that there still remained much work to be done, both to finish construction and during the running-in period before full-scale physics experimentation can begin.

3. Review of the Status of Preparations for the Accepted Program
J.C. Sens presented a review of the present status of preparations of all the experiments in the accepted ISR program along the lines of a draft report which had been prepared by F. Bonaudi and himself (that was distributed at the meeting). Although many of the dates are fairly realistic, those in the more distant future were given with a fair degree of optimism. Even taking this optimism into account, the Committee was gratified to note that there appear to be some experiments that will be sufficiently ready to start taking significant data around the middle of 1971, while some of the others can perhaps begin in a preliminary and partial way.

Although it is still too soon to make definite schedules concerning installations, certain parts of the installation will require a shutdown of the ISR for a period of some 3 to 4 weeks. Because of the present schedules for ISR beam tests, this shutdown cannot take place until after Easter.

At the next meeting of the ISRC, Bonaudi and Sens will inform the Committee of further developments in the preparations and possibilities.

4. Testing at Intersection Region I-4

(a) Test and Survey Experiment

At the request of the NPRC (NPRC 94, item II), the ISRC reviewed its recommendation concerning the Proposal for a Test and Survey Experiment at the ISR, by the CERN-Hamburg-München-Orsay-Princeton-Wien Collaboration (CERN/ISRC/70-5). The Committee confirms its previous recommendation, emphasizes the conditions outlined in the Minutes of its Twelfth Meeting, item 3 (a) (CERN/ISRC/70-12), and adds the following clarifying points:

- (i) The recommendation is for the acceptance of testing equipment, primarily that to be used with the split-field magnet; it is not a recommendation for acceptance of a physics experiment.
- (ii) During the period of this testing, the ISRC would like to be kept informed regularly of progress.
- (iii) If, during this testing, it appears that some of the data being collected might give information of interest to physics, the Committee requests that the Collaboration, or any of its members, submit this possibility at the earliest possible time in the form of a specific proposal that will then be reviewed in the usual way. This request is particularly applicable to the types of data outlined in sections 3 and 4 of the Proposal, but also applies to any other possibilities.

(b) Luminosity and Background Tests at I-4

Continuing the discussion of these tests, held at the ISRC Fourteenth Meeting (Minutes, item 4 (b) - CERN/ISRC/70-28), J.C. Sens presented further details as outlined in CERN/ISRC/70-26 Add. 1. The Committee reaffirmed its acceptance of these tests and emphasized the comments made previously, adding that these tests should also not interfere with the start of those mentioned in item 4 (a), above.

5. New Proposals

The Committee took note of the new proposals received since its last meeting (CERN/ISRC/70-31 and CERN/ISRC/70-33).

At its next meeting, the ISRC requests that the following proposals be presented at the Open Session:

- Proposal to Search for Heavy Baryon Isomers at the ISR, by the CERN-Hamburg-Orsay-Vienna Collaboration (CERN/ISRC/70-18);
- A Proposal to Search for Fractionally Charged or Massive Particles at the ISR, by the Bologna-CERN Collaboration (CERN/ISRC/70-31);
- A Search for Fractionally Charged Particles in Water Irradiated at the Intersecting Storage Rings, by G. von Dardel and S. Henning, University of Lund, (CERN/ISRC/70-33).

At the same time, the three groups in the accepted program that were asked to submit plans for quark-searching, namely, the Saclay-Strasbourg Collaboration, the British-Scandinavian Collaboration, and the Aachen-CERN-Genova-Torino Collaboration, are also requested to present their plans at this session. The Committee noted that it had received one of the requested reports (CERN/ISRC/69-11 Add. 5).

With respect to the proposals received on searches for monopoles, (CERN/ISRC/70-19 and CERN/ISRC/70-21), the Committee feels that a presentation of these proposals at an Open Meeting may be more feasible at a later date. However, the Committee requests F.F. Heymann to give a short report on the information he has received from these groups at the next meeting.

6. Other Business

The ISRC has decided to establish a 2-year rotation of its membership with one half of the members being replaced each year. The members to be replaced after the next meeting are: H.M. Chan, G. Charpak, C. Franzinetti, P. Marin, and A. Minten.

At the next meeting, still with the present composition of members, proposals for new members will be prepared for submission to the Director General.

7. Next Meeting

The next meeting of the ISRC will be held on

<u>Wednesday, February 17, 1971</u>	9:30 a.m.	-	Open Session
	2:30 p.m.	-	Closed Session.

STATUS REVIEW SESSION (Open)

1. Status of the ISR

K. Johnsen repeated the informational review of the beam tests in the ISR Ring I that had been presented at the Closed Session.

2. Status of Preparations for Experimental Program

J.C. Sens gave a detailed review of the status of preparations of all experiments and facilities as outlined in

the draft report prepared by F. Bonaudi and himself (distributed to experimental groups). This review was interspersed with comments and corrections from the experimental groups involved.

Bonaudi and Sens will incorporate all up-to-date information and revisions into this report that will be published and distributed shortly (CERN/ISRC/71-4).

The Chairman of the ISRC emphasized that there is, as yet, no attempt to fix dates of installation of experiments and that the time for the start of the experimental program at the ISR cannot be determined now. The ISRC plans to have further open discussions of this kind with the experimental groups to keep it up-to-date on these preparations, to help resolve problems, and to provide guidance for future detailed planning.

Sens also described briefly the plans for taking background and luminosity measurements at intersection region I-4 during the forthcoming ISR running-in. He mentioned the meetings being held in this connection and suggested that groups wishing to do early testing in this region should bring their requests to these meetings where such tests can be planned and scheduled with the ISR co-ordinator.

M.H. Blewett, Secretary ISRC

