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CERN/ISRC/74-22

19 April 1974

EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

MINUTES OF THE FORTY-SEVENTH MEETING

OF THE INTERSECTING STORAGE RINGS COMMITTEE

HELD ON 17 and 18 APRIL, 1974

OPEN SESSION (held on 17 April)

1. P. Strolin gave a short presentation of a Proposal for an Experiment on Single Diffractive Production (CERN-Pisa-Stony Brook collaboration).
2. P.L. Braccini briefly outlined the Request for Permission to Study the Production of Charged Particles at Large p_T in the 90° British-MIT-Scandinavian Spectrometer, and Correlated Events Topologies (British-Scandinavian and Pisa-Stony Brook groups).

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CLOSED SESSION (held on 18 April)

Present: H. Schopper (Chairman), M.G. Albrow, M. Banner (part time), G. Bellettini (part time), M.H. Blewett, F. Bonaudi, A.B. Clegg, G. von Dardel, P. Falk-Vairant, M. Jacob, W. Jentschke (part time), F. Muller (part time), J.H. Mulvey, E. Picasso, A.M. Wetherell.

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

- Proposal to Measure the Ratio of the Real to the Imaginary Part of the Proton-Proton Strong Interaction Forward Scattering Amplitude at the Highest ISR Energies, by the CERN-Rome collaboration, CERN/ISRC/74-17.

- Letter of Intent: An Experiment on Diffraction Dissociation at Small Momentum Transfers, by the CERN-Holland-Manchester collaboration, CERN/ISRC/74-20.

1. The Minutes of the forty-sixth meeting of the ISRC were approved.

2. Status Report

The ISR Co-ordinator, M.G. Albrow, outlined the status of the experiments and the planned schedule for physics runs for the next period. He also reported on the accident which had occurred at the end of March when the vacuum chamber at intersection I-2 was crushed by some scaffolding that had been left near the chamber during a controlled access period and which was pushed against the chamber as the large-angle spectrometer was moved to smaller angles. The loss in physics running time was of the order of a week (189 hours) and some time for machine development (47 hours) was also lost. Plans are under way for rescheduling much of the lost time.

3. Schedule for Experiments in the Second Half of 1974

The Committee recommends approval of the following schedule for the second half of this year:

- Experiment R 105 through the 5th period (end July) at which time it is expected to be finished.
- Experiment R 106 through the 7th period (end September) at which time it is expected to be finished.
- Experiment R 107 to start installation in the 7th or 8th period and, although final installation would not be complete until early 1975, this experiment could start taking some data in the last two periods of this year.
- Experiment R 201 is now considered to be finished since the group is taking data for Experiment R 206, to run to the end of this year at which time it is expected to be finished.
- Experiment R 205 to the end of the year at which time it is expected to be finished.
- The experiments at I-4, at the SFM facility, have already been scheduled.

- Experiment R 602 through the 5th period (end July) at which time it is expected to be finished.
- Experiment R 701 through the 5th period (end July) at which time it is expected to be finished.
- Experiment R 801 to the end of the year at which time it is expected to be finished.
- Experiment R 802 to the end of the year at which time it is expected to be finished.
- Experiment R 803 through the 8th period (end October) at which time the original part of the proposal is expected to be finished.

4. Discussion of Proposals Presented at Open Session

- (a) On the Proposal for an Experiment on Single Diffractive Production, by the CERN-Pisa-Stony Brook collaboration (CERN/ISRC/74-15 and CERN/ISRC/74-9) the Committee expressed its interest in the physics of the experiment but felt that the technological realization should be studied further and postponed any recommendation until the next meeting of the ISRC.
- (b) On the Request for Permission to Study the Production of Charged Particles at Large p_T in the 90° British-MIT-Scandinavian Spectrometer, and Correlated Event Topologies, from the British-Scandinavian and Pisa-Stony Brook groups (CERN/ISRC/74-12), the Committee recommends approval of this experiment as an extension of Experiment R 803 with the provision that no special ISR beam conditions are asked for it. It is expected that this part of Experiment R 803 would be finished by the end of this year.

5. Items Pending from the Last Meeting

- (a) On the Request for Continuation of Experiment R 603, from the R 603 collaboration (CERN/ISRC/74-8), the Committee decided after considerable discussion to recommend approval for continuation of this experiment under the following conditions:
 - i) the continuation would only be for periods 6, 7 and 8 (from mid-August to end October) at which time this experiment would be expected to be finished;

- ii) the Director of CERN Physics I Department would receive written agreements from the spokesmen of Experiments R 602, R 603, and R 604 that all necessary equipment for this continuation of R 603 will be made available for it;
 - iii) for this continuation the minimum amount of change would be made in the equipment used for the previous part of R 603;
 - iv) data analysis for this continuation would make use of computing facilities outside CERN.
- (b) On the Memorandum: Scheduling of Experiment on Large-Angle Elastic Scattering and on Related Processes, from the CERN-Harvard-Genova-Munich-Northwestern-UCR collaboration (CERN/ISRC/74-14), the Committee recommends that this already approved Experiment R 604 should start installation at the completion of Experiment R 603, at the end of period 8 (end October). Scheduling of all experiments in 1975 will be considered at a later meeting of the ISRC.

6. Items Pending from Previous Meetings

- (a) On the Revised Proposal for a 4π -Detector to Investigate Multibody Events at the ISR, by the Aachen-CERN-Genova-Harvard-Munich-UCR collaboration (CERN/ISRC/72-32 Add. 3, Add. 4, and Add. 5), the Committee was pleased to hear from some of its members the state of progress in the preparatory studies requested by the ISRC at its 41st meeting.

The Committee now requests the group making this Proposal to present a status report on these preparatory studies at the Open Session of its June meeting, and would like to receive a written report containing a list of those who are working on these studies and an up-dated arrangement of equipment.

- (b) On the Proposal for a Study of Large Transverse Momentum Phenomena, by the Brookhaven-CERN-Saclay-Syracuse-Yale collaboration (CERN/ISRC/73-33), the Committee expressed its interest in the physics of this experiment and in the techniques proposed, and appreciated hearing from some of the Committee members a report on the state of progress of preparatory studies for this Proposal.

The Committee now requests the group making this Proposal to present a status report on these preparatory studies at the Open Session of its June meeting.

The Committee would also be interested in receiving a written proposal for a test set-up at the ISR for these techniques, giving a time schedule, the arrangement and location of equipment, the latter to be discussed with F. Bonaudi and M.G. Albrow.

7. Discussion on Newly Received Documents

- (a) The Committee took note of the Proposal to Measure the Ratio of the Real to the Imaginary Part of the Proton-Proton Strong Interaction Forward Scattering Amplitude at the Highest ISR Energies, by the CERN-Rome collaboration (CERN/ISRC/74-17), and requests the group to present this Proposal at the Open Session of the next ISRC meeting.
- (b) The Committee took note of the Letter of Intent: An Experiment on Diffraction Dissociation at Small Momentum Transfers, by the CERN-Holland-Manchester collaboration (CERN/ISRC/74-20) and, with the assurance that the full Proposal will be received before the pre-meeting deadline, requests the group to present this Proposal at the Open Session of the next ISRC meeting.

8. Next Meetings

The next meeting of the ISRC will be held on Monday, 27 May, 1974, with an Open Session in the morning in the CERN Council Chamber and a Closed Session in the afternoon in the ISR Conference Room.

Future meetings of the ISRC are scheduled for:

Friday, 28 June, 1974 (Open and Closed Session),

Tuesday, 23 July, 1974 (provisional).

M.H. Blewett