

CERN/AC/18  
29 June 1959

ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE  
**CERN** EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

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ADVISORY COMMITTEE ON VISITING TEAMS

Fourth Meeting

Geneva - 9 April, 1959

DRAFT MINUTES

CERN LIBRARIES, GENEVA



CM-P00074473

DRAFT MINUTESPresent:Members

Prof. A. Berthelot  
 Prof. J.K. Bøggild  
 Prof. G. Puppi  
 Prof. H.W.B. Skinner  
 Prof. S.A. Wouthuysen

Substitute

Prof. F. Houtermans

CERN Staff

Prof. C.J. Bakker	Director-General
Prof. G. Bernardini	Director, SC Division
Prof. M. Fierz	Director, Theoretical Study Division
Prof. W. Gentner	Director of Research, SC Division
Prof. L. Kowarski	Director, STS Division
Mr. D. Harting	SC Division
Dr. B. Hedin	SC Division
Dr. A. Lundby	SC Division
Prof. W. Paul	SC Division
Prof. P. Preiswerk	SC Division

Part-time

Mr. S.A. ff Dakin      Director of Administration

1. APPROVAL OF THE DRAFT MINUTES OF THE LAST MEETING (CERN/AC/12)

Professor BAKKER opened the meeting and asked if there were any comments on the minutes of the previous meeting.

The Draft Minutes of the Third Meeting were approved.

2. TECHNICAL PERFORMANCE OF THE SYNCHRO-CYCLOTRON (CERN/AC/15)

Dr. HEDIN gave some further information on the performance of the synchro-cyclotron during March. There had been a break of two weeks due to difficulties with the radiofrequency system. The shut-down of the cyclotron for installation of the  $\mu$ -meson channel will not take place in June-July, but about three months later.

Professor SKINNER asked if a figure could be given for the proportion of the total time that the beam of the cyclotron was actually on.

Dr. HEDIN proposed that this figure would be given in the draft minutes of this meeting. (cf ANNEX I)

3. SC EXPERIMENTAL PROGRAMME (CERN/AC/13 and CERN/AC/14)

Dr. HEDIN presented a proposal for the distribution of the available cyclotron time and laboratory space among the different visiting teams during the next year. (cf ANNEX II). This tentative programme for the SC visiting teams was approved by the Committee.

Professor BAKKER remarked that the laboratory space available did not permit a too prolonged stay of any single visiting team at CERN. He felt that this was also against the principle of visiting teams and asked the Committee to keep this in mind when a group asked for cyclotron time in addition to the original allocation.

At the request of Professor PUPPI a review of the current experimental work of the CERN groups was given by Professor BERNARDINI. The number of groups as well as the number of people in each group is still fairly large, but this situation is expected to improve considerably when the proton-synchrotron starts operation at the end of this year.

The experiments of the visiting teams were then discussed.

VT 2 Utrecht

Professor WOUTHUYSEN explained that this group had had some difficulties with their experimental apparatus, but that these were now largely overcome.

Professor BERNARDINI remarked that in his opinion a much larger number of shifts were needed for the experiment than the group asked for, even in case a  $\pi^+$  beam of sufficient resolution could be produced and this was doubtful.

It was agreed to postpone to the next meeting the decision whether the experiment should be continued.

VT 4 Harwell and University College London

Professor BERNARDINI said that in view of the high scientific interest he had authorized these groups to start with the experiment on parity non conservation in strong interactions although the cyclotron time allocation had not yet been passed by the Committee.

The Advisory Committee agreed that this experiment could be continued.

It will be decided at the next meeting whether the experiment on polarisation effects in  $\pi^-p$  scattering should be kept on the programme.

VT 9 and 10 Padua and Bologna

Professor PUPPI said that he did not recommend exposure of the Padua propane bubble chamber to the  $\pi^-$  beam and asked if the AC would agree to have the time allocated to the Padua group for  $\pi^-p$  transferred to the group of Bologna.

This was agreed.

It was agreed on a suggestion by Professor SKINNER that any visiting team wanting to do an experiment using a propane bubble chamber should prove conclusively that the experiment was not better done with a H<sub>2</sub> bubble chamber as H<sub>2</sub> bubble chambers were now available.

VT 20 Fribourg

The purpose of the experiment was not well understood by the Committee as too little information on this experiment was available.

It was decided that, after discussion with Dr. Hahn, Professor Bernardini would decide whether the experiment could be started before the next meeting. \*

Several members felt that in general too little information was available about the experiments that were discussed.

It was agreed that before the next meeting Professor Bakker would ask all visiting teams to submit a two page report on the state of their experiment.

Emulsion groups

Professor SKINNER felt that even for comparatively short exposures full information about the purpose of the experiment should be given by the groups concerned.

This was agreed.

Professor SKINNER then put before the Committee if it felt that the 30% of the cyclotron time allocated to the visiting teams was sufficient.

The CERN directors thought the percentage should not be increased. Generally speaking, research by the CERN groups was more efficient than that of visiting teams that often are sent out by institutes having as yet little experience in high energy physics. Thirty percent of the cyclotron time for visiting teams still seems to be a reasonable compromise between the aim of high scientific output on the one hand and maximum service to research institutes of the member states on the other hand.

The Committee agreed that 30% of the cyclotron time for the visiting teams was reasonable for the time being.

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\* Further information on this experiment was received just after the meeting.

4. NATIONAL TEAMS VISITING CERN (CERN/301 and CERN/AC/17)

Document CERN/301/Rev.1 with ANNEX I-IV was approved by the Advisory Committee.

The remark was made by several members, however, that applicants should be encouraged to write rather more comprehensively about the purpose of their experiment than the questionnaire CERN/301/Rev.1 ANNEX IV suggested.

DATE OF NEXT MEETING

6 October 1959.

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PERFORMANCE OF THE SYNCHRO-CYCLOTRON DURING THE PERIOD  
FROM 5 January 1959 TO 3 May 1959 (17 WEEKS)

The time is given in hours.

	<u>Time</u>	<u>Percentage</u>
Cyclotron staffed	2784	100
Maintenance and improvement	404	
Faults	<u>484</u>	
Total	<u>888</u>	<u>32</u>
Cyclotron available	1896	68
Change-over	<u>422</u>	<u>15</u>
Beam on	1474	53

# Visiting team Programme SC 1959

No	Visiting team	Type of experiment	Total no shifts required	1959	1960	1961
2	Utrecht		23	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
3	Liverpool		45			6 shifts per month
4a	Harwell		60			6 shifts per month
4b	U.C. London		45			4.5 shifts per month
9	Bologna	BC	30			3 shifts per month
10	Pavia	BC				
11	Rome	BC				
12	Birmingham	EM	4			
15	Lyon	EM	4			
16	Neuchâtel	EM				
19	Birmingham					
20	Fribourg		8			
21	Triest	BC	90			6 shifts per month
22	Lausanne	EM				
24	Oxford	EM				
25	Heidelberg	IRR				
26	Bern	IRR				
27	Pisa		25			
28	Copenhagen	EM				
29	Göteborg	IRR				
30	Rome	EM				
			Total	334		

----- Right of cyclotron time  
 \_\_\_\_\_ Laboratory available