



11th November, 1962

CM-P00063852

MEMORANDUM

To : The Members of the Nuclear Physics Research Committee.
 From : P. Preiswerk.
 Concerning: Decisions taken at the Meeting of the Electronic Experiments Committee of 11th November, 1962.

This memorandum contains a summary of the decisions taken at the meeting of the E.E.C. of 11th November, 1962.

Present: P. Preiswerk Chairman
 J.M. Cassels
 G. von Dardel
 B.D. Hyams
 W.O. Lock
 A.M. Wetherell
 E. Zavattini
 D. Harting Secretary

The beam situation and the counter experimental programme at the PS machine for Period III 1962 and Period I 1963 were discussed.

I Period III, 1962 (23rd October, 1962 - January/February 1963)

The following new decisions were taken (see Table I):

- 1) S₁₈ Tests recommended in Period III if this is technically possible without disturbing the other experiments in any way.
- 2) S₆ It is recommended that machine time is allocated in q beam in Period III for the measurement of the Σ^0 polarization. Neutrino spark chamber test have first priority in q beam however.
- 3) S₁₁ Can do tests in q beam with 3rd priority (only as parasite).
No tests in m₂ beam in Period III
- 4) Neutrino spark chamber tests Tests in q beam with first priority.
Calibration of spark chambers in m₂ beam recommended, but the E.E.C. does not agree with any activity of neutrino group in this beam, which is not directly connected with the neutrino experiment.

II Period I 1963 (For this purpose Period I is considered to cover the whole of 1963 - after March)

Apart from the list of experiments in Table I, the following experiments were considered:

An experiment on Σ^- decay proposed by Duke, Mann, Rubbia and Sens.

S₁₄ Setting up of muon beam in East Area and μ -p scattering.

The following decisions were taken on Priorities and Status of the counter experiments in Period I 1963.

S₁₉ It is recommended that a new high energy proton beam is built as soon as possible in the East Area.

S₁ Should finish in Period III 1962.

S_{5, 18} It is recommended that these experiments share the machine time available in the new d beam which will be set up in Period I 1963.

S₆ No machine time in Period I 1963.

S₁₁ A decision on this experiment will be taken at the end of 1962 after the final results of the tests are known.

S₂₀ It is recommended not to allocate any machine time to this experiment in Period I 1963, unless it is shown clearly that this line of research with this technique is going to give interesting results in physics.

S₁₄ The E.E.C. recommends that the muon beam is definitely built in the autumn of 1963. Decisions on the experiments to be done in this beam in 1964 will be taken later.

Σ^- decay experiment Provisionally accepted for Period I, but on the condition that the CERN physicists that have already acquired experience in this type of research (Fidecaro group) cooperate with the proposers to do this difficult experiment.

Table I PS Counter Experiments in Period III

Beam	Symbol	Name	Title	Recommended Priority and Status.
a ₅	S ₁₉ (Old symbol C ₄)	Taylor	Small angle p-p scattering	a Test of sonic spark chambers.
d ₁₃	S ₁	Harting	$\bar{\pi}$ -p scattering (7° - 50° c.m.)	a Apparatus being set up.
	S ₅	Backenstoss	Pion form factor	b Stand-by for d ₁₃
	S ₁₈	Weber	$\bar{\gamma}$ -p backward scattering	b(test) Tests in Period III as parasite, if technically possible
q ₁		Faissner	Neutrino spark chamber tests.	1st priority in q beam
	S ₆	Fidecaro	Σ^0 polarization	2nd priority in q beam.
	S ₁₁	Conversi	p \bar{p} → electron pair	3rd priority in q beam.
m ₂		Faissner	Neutrino spark chamber calibration	a Only calibration for neutrino experiment. No side-lines.
	S ₁₁	Conversi	p \bar{p} → electron pair	Not in Period III
a ₂	S ₂₀ (old symbol L ₂)	Lundby	Strange particle physics	a