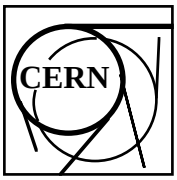

EUROPEAN LABORATORY FOR PARTICLES PHYSICS

CERN/SPSC 98-5
SPSC 36
29 January 1998

SPS AND PS EXPERIMENTS COMMITTEE

Decisions taken at the 36th meeting on 20 January 1998

OPEN SESSION

Status report from NA45 : J. Stachel.

Status report from NA49 : P. Seyboth.

A pixel detector upgrade for NA50: P. Sonderegger.

Status report from NA50 : A. Musso.

Status report from NA52 : K. Pretzl.

Status report from NA57 : F. Antinori.

CLOSED SESSION

Present: P. Bagnaia, J.-P. Blaizot, W. Braunschweig, M. Cavalli-Sforza, B. D'Almagne (Chairman), A. De Roeck, Y. Desclais, D. Drijard (Secretary), L. Foà, G. Goggi, P. Grafström, K. Green, J.-F. Grivaz, K. Hübner, D. Jacobs, K. Jakobs, K. H. Kissler, K. Königsmann, B. Koene, R. Landua, M. Neubert, A. Norton, M. Pennington, A. Pich, L. Ristori, J.-P. Riunaud, D. Simon, J. Stachel*, M. Tyndel, E. Tsesmelis, M. Turala, G. Wilquet, A. Zalewska.

* part-time

Apologies: B. Gavela, D. Websdale.

1. Introduction:

The chairman presented apologies from two members of the committee. He welcomed the new members, A. De Roeck, Y. Desclais, A. Pich and D. Websdale, one of whom could not attend the meeting.

2. Approval of the minutes:

The minutes of the 35th meeting were approved with the following modifications:

- the last sentence of point 8.1 should be replaced by “They could be reconsidered only in case the new beam project would have to be abandoned”,
- D. Jacobs had been omitted in the list of members present at the meeting.

3. Report on the meeting of the Research Board:

The recommendations of the SPSC had been endorsed by the Research Board, namely:

- the approval of the request of NOMAD to continue running in 1998,
- the first phase of the ASACUSA proposal in the AD, to study atomic spectroscopy. Its code number is **AD3**. The development of the RFQ had been encouraged, the related physics programme would be discussed at a later date,
- the SPS and PS schedules.

4. Status report on the SPS:

The SPS had been after the fire as reliable as it was before. The transmission efficiency had been slightly lower from the beginning of October onwards.

5. Status report on the PS:

The PS complex had seen its best year ever, with a fault rate below 6%.

6. Status report on SPS and PS experiments:

The co-ordinator reviewed the testbeam usage of groups from outside CERN. Balloon-borne Electron Telescope with Scintillating fibres (BETS) is a detector used to measure high energy cosmic electrons by a collaboration of Japanese institutes. Tests to estimate the rejection against background protons were made in the X5 beamline in the range 10-250 GeV. CEC, a CERN-EU collaboration of 15 groups using the CERN-European Reference Field facility, aims at monitoring radiation field at aviation altitudes. It used the H6 beamline to calibrate dosimetric instrumentation. ZEUS used the X5 beamline for calibration. HERA-B tested a prototype electromagnetic calorimeter in the H4 beamline. Finally BaBar studied the detection efficiency of silicon vertex detector. All the teams were pleased with the performances of the machines.

7. Discussion of the open session:

7.1 NA52:

This experiment will complete its data taking in 1998 and, particularly, the strangelets search should be finished in good conditions. The committee decided that no less than 5 weeks continuous running should be allocated.

7.2 NA45:

The schedule of the upgrade of the detector appeared extremely tight, so that the beam-time would be allocated subject to a satisfactory state of the apparatus. Until this decision is taken, running with protons and 19 days with ions were reserved for the TPC start-up.

7.3 NA49:

The committee was pleased by the quality of the detector, its efficient reconstruction of the high multiplicity of the events. The collaboration claimed to have indications that the Pb-Pb collisions at 160A GeV/c are already beyond the QGP phase transition. Consequently their strategy is to vary the kinematical conditions to locate this transition and request to have low energy running as soon as possible. The committee noted that proton reference data are an important part of this experiment.

7.4 NA50:

In view of the potential integrated luminosity accessible in 1998, and of a possible low energy run in 1999 (see point 7.6), the SPSC felt that the priority should put on further study of J/ψ and ψ' production. The committee asked the collaboration to re-evaluate its short term programme and submit a memorandum for the next meeting. The study of a pixel detector

was encouraged in the perspective of a proposal for an experiment with a physics programme based on this upgrade.

7.5 NA57:

The SPSC took note of the difficulties to obtain the bonded pixels from industry, and of the strategy to alleviate this problem. The committee noted with satisfaction the plans to complete the approved physics programme.

7.6 Low energy period:

The experiments NA45, NA49 and NA57 requested a low energy period in 1999. The committee recalled that such conditions are an integral part of the programme foreseen to permit to explore different energies densities. It was *a priori* favourable and 1999 seemed a good time for this run. The SPSC recalled however that running at low energy will be subject to the success of the MD scheduled for the end of 1998.

8. Schedules of the machines:

The co-ordinator showed the schedule of the 1998 SPS Fixed Target Programme; the beam-time allocations for SPS physics and LHC tests are about equal. He then indicated the irradiation facilities which exist at the LEP Pre-Injector. Finally he reported on the consequences of LHC civil engineering for the SPS operations in the period 1998-2001: according to the best current predictions a few days in total of SPS downtime may be expected for re-alignment purposes, mostly in 1999.

9. Any other business:

The committee received a memorandum from the TOSCA collaboration which will be analysed by the referee at the next meeting.

The committee requested status reports to be presented at the open session of the March session from COMPASS, NA48, WA89 and WA102, and at the May session from JETSET, OBELIX and X-Barrel.

The 37th meeting will be held on **Tuesday 24** and **Wednesday 25 March 1998**

The 38th meeting will be held on **Tuesday 26** and **Wednesday 27 May 1998**

10. Documents received:

Low mass dimuon physics in NA50 upgraded by adding a pixel vertex spectrometer (LAPP, Annecy-le-Vieux - IFA, Bucharest - Univ. di Cagliari/INFN, Monserrato - LPC and CNRS-IN2P3, Clermont-Ferrand - CERN - LIP, Lisbon - INR, Moscow - IPN, Univ. de Paris-Sud and CRNS-IN2P3, Orsay - LPNHE and CNRS-IN2P3, Palaiseau - CEA/DAPNIA/SPHN, Saclay - Univ. di Torino/INFN, Torino - IPN, Univ. Claude Bernard Lyon and CNRS-IN2P3, Villeurbanne - YerPhI, Yerevan);
CERN/SPSC 97-22/P265 Add.1.

Status and future programme of the NA49 experiment (Univ. Athens - LBL, Berkeley - Birmingham - KFKI, Budapest - CERN - INP, Cracow - GSI, Darmstadt - Univ. of California at Devis - JINR, Dubna - Univ. Frankfurt - Univ. California at Los Angeles - Univ. Marburg - MPI, Munich - INS, Warsaw - IEP, Warsaw - NPL, Seattle - Yale Univ., New Haven - Rudjer Boskovic Inst., Zagreb - Comenius Univ., Bratislava - Univ. Houston); CERN/SPSC 98-4/P264 Add.2.

TOSCA Collaboration: TOP - *A prototype for the TOSCA experiment*; SPSC 98-2/M604.

SPSC list of members 1998; SPSC 98-3/G11.

D. Drijard