SPSC Summary

Very long and dense meeting!

Open session: ATRAP, ASACUSA, ALPHA

COMPASS future, NA49 future

OSQAR

Closed session:

The SPSC was impressed with the progress made by all three collaborations in 2006, in spite of difficulties with AD beam delivery. The proposed program for 2007 was considered adequate and all three are recommended for all the available beam time. The experiments reiterated the need for non-destructive beam instrumentation.

OPERA reported that brick production is about to start and that they hope to have 20% available at the start of the run and 50% at the end of the run (SPSC requested 75% to approve serious running). Request 2 weeks at startup for commissioning of electronics detectors and 10¹⁹ pot for physics once 50k bricks installed. Interferes with

- recommendation to study & improve water inlet bellows and water sprayers (4-6 months)
- need to have a 'clean' machine at the end of the run for MTE installation.

The work for improving the water inlet bellows and sprayers should start. Depending on the date of completion and the speed of progress of emulsion brick production, a decision on the OPERA running will be taken at the next meeting.

COMPASS presented its plan for the coming years. For 2007 about half the time with muons and half the time with hadron beams + Cedar. They need about 3 weeks to switch from muons to hadrons. The muons are with a proton target (so far deuterons). The hadron run aims at glueball and exotic searches and at measuring the Primakof effect. The SPSC regretted very strongly that no performance figures for the new detectors were presented and that no physics results were shown from the pilot hadron run in 2004. On top of that they were not very happy with the analysis outcome in general (very few papers in 10 years of COMPASS). The muon running is recommended, but before any hadron beam can be approved, the experiment must come with solid evidence that they can make a major contribution to the field, based on detector performance and on results from the pilot run.

P326 was recommended both for the physics measurement and the R&D program. The physics measurement was very strongly supported.

NA49 plans to run two somewhat independent programs:

- particle production measurements for T2K and cosmic ray experiments
- heavy ion interactions to search for the critical endpoint

Both physics cases are considered compelling, but their feasibility must still be evaluated. They request proton beams in 2007 and 2008. The 2007 run (30 days) is recommended, provided they are compatible with the existing H2-VLE installation. The heavy ion run requires many energies and species of the primary beam. The implications for AB are heavy and need to be studied. The SPSC recommends to mandate such a study. The 2008 run and ion program will be evaluated on its scientific merits and the conclusion should arrive together with the outcome of the AB studies to allow a recommendation (or not) for this program. The ions will only be commended after the collaboration has shown its capability to analyze the particle production data.

The running has been recommended for H4 and H8 crystals (priority for protons to P326), DREAM and CALICE. Referees have been appointed for OSQAR. HARP review next time (?)