April 3, 1998
/tex/projects/spectro/mtg13.tex

LEP SPECTROMETER PROJECT

Summary Notes of the 13^{th} meeting held on April 2, 1998

Present: W. Coosemans, D. Cornuet, B. Dehning, G. De Rijk, N. Hilleret, J. Montes, G. Mugnai, Y. Muttoni, S. Myers (chairman), M. Placidi, E. Torrence, L. Vos

Excused: None

10:30 - Comments to Summary Notes of previous meeting - On the point "Preparation for installation" M. Placidi pointed out that the construction of the two new vacuum chambers after the overheating of the original ones was achieved in the record time of **3.5 days** under the direct control of Y. Muttoni.

10:35 - Status of installation - Y. Muttoni gave the status of the installation. The stone blocks survived the drilling for the water cooling manifolds and the transportation down to the LEP tunnel. They are beautifully installed on the "EMACO" bed and (pre)aligned in H.C.332, waiting for the bake-out next week. Water cooling connections and lead box for electronics are being installed starting tomorrow, as per updated planning (J. Montes).
Still under construction are the thermal protections for the three PU's and the wire supports (invar) for the WPS with associated horizontal adjust for wire initial positioning.
The wires will be housed in AL tube protection as close as possible to the sensors to avoid influence from air movements in tunnel. Aluminium should be magnetically fine and this year's test will tell.

10:50 - Instrumentation - B. Dehning presented a description of the instrumentation located at the spectrometer.
Four NMR probes (two in each dipole) will measure the main field and a three-axis **Fluxgate** magnetometer will be used to monitor stray fields in the mG range.
Forty temperature probes are distributed on the several components including the absorbers, the PU bodies and the magnet yokes.
Heat exchangers for the temperature control of the PU's will be located close to the adjacent dipoles (H.C.333) to avoid magnetic influence on the spectrometer components.
J. Montes produced a detailed version of the revised planning up to the **LEP closure on Friday, April 24 at noon** (see attached copy).

11:00 - Dipole mapping - G. De Rijk reported on the third brainstorming meeting on field mapping. Three main points were raised (see attached copies of slides), namely:

1. **Environmental influence on measurements /temperature effects**. This will require measurements on the MBI dipole and MD tests during this year run (J. Wenninger). A thermal model for the MBI dipole is sought and help is needed (student?) in SL or from experiments.

2. Same for **magnetic effect**. This concerns essentially differenced between the ISR tunnel and the LEP one. Effects from degaussing cycles and metallic components around the vacuum chamber will have to be quantitatively estimated.
3. **Software and DAQ**. Help is also needed in this area (Mike, Eric?). The subject will be discussed in the next mapping meeting.

11:25 - Budget - M. Placidi revised the budget situation with H. Wahl. The situation is rather **red** than **pink**: out of the 450 KCHF allocated for 1998 we have already 433.8 committed (including about 135 paid) **BUT** there are another **estimated** 230 KCHF waiting for us ahead!
Ergo: we have to limit expenses to extremely urgent issues from now on (Steve said).

11:35 - AOB - N. Hilleret asked to discuss the layout requirements for the next year. In particular he would like the new vacuum chamber for the MBI dipole to be defined in order to plan its construction in time. The point is on the agenda for the next meeting. A dedicated short meeting is called for Wednesday 15.

11:40 - End of meeting

The **NEXT MEETING** will be held on

THURSDAY, April 16, 1998 at 10:30
in JBA ROOM 864/2-B14

Tentative AGENDA (to be confirmed later)

- Comments on Notes of previous meeting
- Status of installation — Y. Muttoni, N. Hilleret, B. Dehning.
- Status of DAQ — E. Torrence
- Preliminary 1999 layout / MBI vacuum chamber — Discussion
- Report from mapping meeting — W. Kalbreier
- AOB

M. Placidi