Minutes of the 174th Energy Calibration Meeting held on 12 April 1999

Pippa Wells has now stepped down as chairperson of the ECAL group. The new chairperson would like to offer Pippa thanks and congratulations for her expert stewardship of the group.

1 Status of RF

Ernst Peschardt reported that it has proved necessary to retune all the RF cavities (in progress). This is because during the shutdown cables were removed, and then the same cables reinserted, but not necessarily in the same cavities...

2 Status of database logging for 1999

Ronny Billen summarised the status of the LEP database for the coming run.

Certain technical problems have been resolved, and decisions made. For instance the Oracle version has been frozen at 7.3.4, and this will be supported by the company up to and through the year 2000 (but not beyond!). Most of the old data have been archived, and the backup facilities have been made more efficient. All software is in principle 'Y2K compliant'.

As regards the tables and the quantities that will be logged, there is very little change with respect to 1998. The tidying up of the DB structure means that certain tables have been renamed – G.W. will follow up the consequences of this for the ECAL group SQL scripts with Ronny. The major difference will be in those quantities of the spectrometer which will be logged. Eric Torrence will coordinate with Ronny and oversee this.

3 Status of spectrometer

Giuseppe Mugnai, Eric Torrence and Frederico Roncarolo reported on the status of the spectrometer.

The mapping of the spectrometer magnet (MBI) in the ISR lab finished shortly before Easter. Many maps were taken with a moving arm carrying NMRs and Hall probes, but without the vacuum chamber in place. The chamber was then inserted and complementary maps made with the 'mole' – a chariot carrying NMRs and a coil which moves up and down the vacuum chamber with its position measured by laser interferometry. The MBI was successfully moved and inserted in the tunnel and more 'mole maps' were performed in situ. Frederico is presently analysing these data and will report in the near future. It is hoped that the mole maps in the tunnel and in the ISR will yield consistent field integrals.

At present work is proceeding on other aspects of the installation. These include the stretched wires, the shielding around the cooling stations, the mounting of the four reference NMRs in the MBI itself, the connection of the temperature probes and the DAQ.

Eric said that there had been a meeting with Bergoz, the company which supplies the readout electronics for the BPM's. As a consequence of R & D performed for DAPHNE an improved design will soon be available which should solve some of the problems encountered last year. A full set of cards will not become available until mid-June, but some prototypes will be ready at the start of the run. Eric also remarked that it will be possible to read out the 4 BPM buttons separately, as well as the calculated position. This extra information may prove useful in dealing with higher order multipole effects (see R. Assman, Spectrometer meeting, February 18, 1999).

4 Status of tunnel NMRs

Giuseppe Mugnai reported that the installation of the tunnel NMRs was on schedule. All NMRs will have new tips with respect to the end of last year. In addition to those positions equipped in 1998 it is intended to equip spare positions with three devices bearing a glass tip. It is hoped that these will prove more radiation hard than the conventional plastic tip devices.

5 Status of flux loop

Guy Wilkinson read out a message from Joerg Wenninger (not present) which warned that there was evidence that the flux loop was suffering increasingly serious radiation damage. Two unstable octants have been patched up during the short down, but further intervention is disfavoured because of the risk of causing more damage.

6 Next meeting

The next meeting will be at 15:00 on Friday 30 April. The main purpose of this meeting will be to review the 1999 depolarisation strategy, particularly for the start of the run.

Guy Wilkinson, 13 April 1999.