Minutes of the 224th Energy Calibration Meeting held on 17 October 2003

Present: Pete Renton (by phone), Eric Torrence (by phone), Mike Hildreth (by phone), Pippa Wells, Jorg Wenninger, Guy Wilkinson

1 Draft, memo and final numbers

The meeting met to discuss draft 3 of the paper, and to agree on final numbers which should be distributed to the experiments in the form of a memo, a draft of which had been circulated prior to the meeting.

The meeting approved the procedures and numbers in draft 3. The following small changes were made:

- RF errors in 1996 increased from 4 to 5 MeV;
- Band of FL validity changed to 72-106 GeV.

Concerning the memo, small changes were suggested to the text, and subsequently implemented. The following questions were raised:

- Is the correlation matrix correct? Checked and found to be OK.
- Are the energy spread errors, inherited from the first LEP 2 paper, still valid? After the meeting Jorg considered this and decided that yes, 5% is still a good number, apart from 2000 where BFS effects mean that without further work the uncertainty is $\sim 10\%$.
- It was pointed out that it it slightly odd that the fit result appears to lie above most of the input data points (see figure 1).

After the meeting studies were made to understand this last point. The fit was repeated with: 0% correlation between the FL data; a single mean Q_s point used, rather than the individual measurements; a single Q_s point and 0% correlation between all measurements. The results are shown in table 1. It can be seen that as the correlations are removed the fit tends towards the naive expectation. It was concluded that the result is trustworthy.

The memo was distributed to the experiments on 31 October. The next paper draft will be released within the month. This shall be complete and suitable for detailed comments on the text.

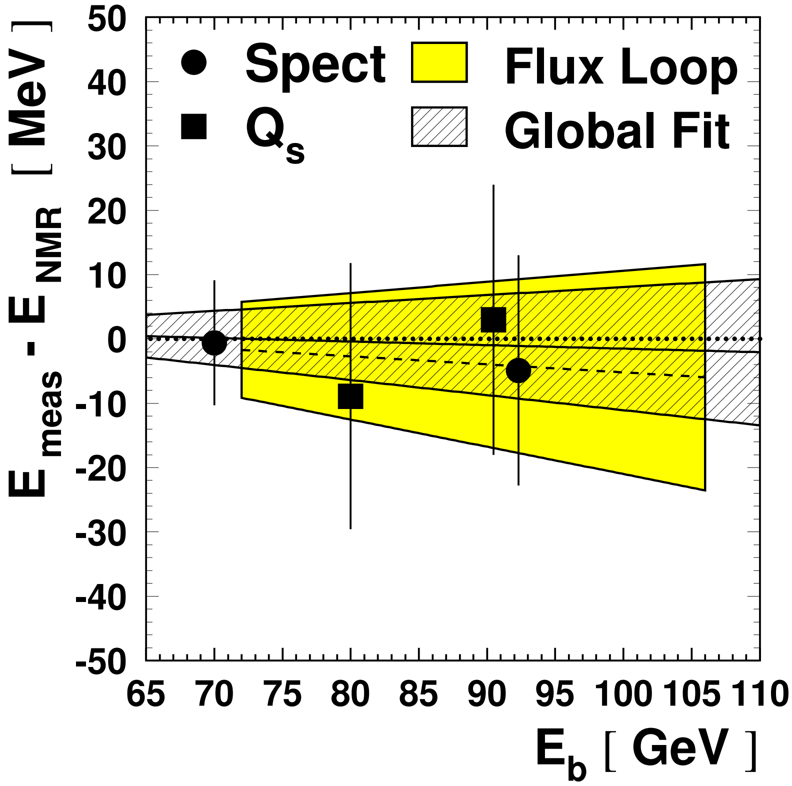

Figure 1: Measurements and fit result.

Method	Offset [MeV] at $E_b =$ 80.7 GeV	Offset [MeV] at $E_b =$ 103.3 GeV
Standard fit	-0.4	-1.7
0% correl in FL	-2.1	-3.0
Single Q_s point	-2.6	-5.4
As above & 0% correl	-2.6	-5.8

Table 1: Changes in fit result for various input strategies.

2 IEEE Poster

Eric and Mike have prepared a nice poster on the energy calibration for the IEEE conference in Oregon. The meeting suggested a few minor improvements. The final poster is available on the ECAL web page.

Guy Wilkinson, 31 October 2003.