

Minutes of the Eighth Meeting of the Durham-RAL HEP Database Committee held on Tuesday, 19th May 1987, at 14.00 in the seminar room of the Physics Department at the University of Durham.

Present: Dr. P.D.B. Collins, Prof. A.D. Martin (Chairman), Drs. C.J. Maxwell, M.R. Pennington, R.G. Roberts, Prof. I.O. Skillicorn, Drs. W.J. Stirling, D.B. Websdale, M.R. Whalley.

Apologies for absence were received from Dr. D.J. Miller.

AGENDA (prepared by MRW)

1. Minutes of the last meeting
2. Progress report
 - a) General
 - b) Reaction database
 - c) SLAC preprint database
 - d) Data Reviews
3. Promotion & Advertising
4. Future plans & discussion
5. Any other business

Item 1: Matters arising from the minutes of the last meeting

The Chairman (ADM) began by listing issues that would be raised later in the meeting, eg SLAC PPF database, energy-energy correlation review, etc. He commented that the application for a data officer had not succeeded at the last round of the Grants Committee but was graded alpha.

Items 2, 3 & 4: Progress Report & Discussion

MRW reported first on usage. There had been 155 users in the past six months, 85 on their own accounts and 70 using the guest account. The time distribution of this usage reflected the introduction of the SLAC preprint database. The data coding rate stood at 53, somewhat less than usual, because of other activities by the Group. Moreover, there had been a redivision of coding work between RAL and Durham. PDBC questioned the decrease in coding and MRW replied that the other activities did mean that less ~~coding~~ data was being coded at the preprint stage.

MRW then went on to detail improvements to the system: (i) names of particles had been converted to those of the new PDG nomenclature, (ii) a new vocabulary database had been created which allowed access using old particle names, new ones and other aliases. When a search was carried out, this new database was automatically accessed for cross references. MRW commented that this was particularly important for resonances with evolving masses, since masses are an integral part of the new PDG naming. (iii) A link between the reaction databases and that for the SLAC PPF had been implemented, so that if a search was made in the preprint database, it now said that data referenced there appeared in the reaction database. This was possible

'independent record number' of the SLAC PPF system. In discussion it was agreed that this highlighted the need to get as much interesting data into the reaction database at the preprint stage. (iv) beam and target keywords had now been added to the database and either can be searched for.

In progress: MRW suggests that the old bibliographic database should be removed and those items referenced there that are not already in the database should be transferred. Historically, in the old "ELECTRIC" system the bibliographic database was on an on-line disk, whilst the "DATA" databases were on off-line. Now, not only are all linked on-line but the SLAC preprint database has made the bibliography redundant and also confusing for users. MRW reported that an "address list" of HEP institutions from CERN was available on ORACLE at CERN. This could easily be copied and made into a BDMS database on our HEPDATA system in approximately one month.

Advertising & Promotion

Firstly a newsletter was being prepared briefing users of recent changes. Secondly, an updated user-guide and thirdly an advertising poster were being made. There will be a Data Compilers meeting at CERN in October, which MRW & RGR will attend. This will be used as an opportunity to site posters advertising the Durham-RAL databases in CERN terminal rooms. RGR had written to Mr. Schwartz, the Head of CERN's Scientific Information Service, checking whether the database service was yet advertised in the CERN Library. The reply indicated this was not. Once again, the question of some technical support from CERN to implement the SLAC PPF there was discussed. At present this was only accessible through the RAL system, with the main usage via the guest account. RGR emphasised that it had to be a priority to implement the SLAC PPF on the CERN machines. Technically, the delivery of the SLAC PPF is quite straightforward. The coding assistant, Mrs. Miller, sends a weekly request to SLAC and this updates the existing listings overnight. For other databases however transfer to CERN was more complicated requiring the sending of tapes with the problem of updating and 'gardening' of the databases.

The Chairman concurred about the priority of getting the SLAC PPF on CERN machines. On accessing this the other databases should be advertised. These should also be available at CERN, but only updated periodically as resources allowed.

MRW then turned to International Collaborations. The broken Soviet tape reported on at the last meeting had been read successfully and 100 records added from this to the Reaction database. Future collaboration would be an issue at the October Compilers Meeting with a new Soviet/CERN agreement pending.

Turning to the subject of reviews, MRW reported the electron-positron correlation review was complete apart from the final data from TASSO, the present numbers having been read from a graph. IOS suggested writing to Gunter Wolf about the missing TASSO results.

Initiating a discussion of future reviews, the Chairman listed a number of possibilities. The 'deep inelastic scattering review' by RGR would be updated with the new results from CDHS - RGR planned to include figures. ADM agreed that heavy flavour production, though an interesting topic, was, as discussed at several previous meetings, fraught with ambiguity. However, the related subject of fragmentation function results from electron-positron annihilation might be suitable for a review and it was proposed that Barlow, Felst and Wolf might act as contacts for this topic. IOS suggested the inclusion of neutrino and hadron interactions as well - in order to highlight differences (if any) with e^+e^- .

WJS proposed the topic of jet transverse momentum distributions from UA1 & 2, the collider ramping runs and the AFS experiment at the ISR, for review, ready for easy and fruitful comparison with future results from Fermilab Tevatron. This was agreed to be an excellent idea.

Item 5: Under any other business

The Chairman raised several issues that came up in the discussion by SERC of the Project's Grant:

- (a) the continuity of the project when its Manager (MRW) had a fixed term contract;
- (b) where the project and its Manager should be based in the long term;
- (c) the Grants Committee noted that the 10 most frequent users of the database were research students and post-docs;
- (d) there should be greater emphasis on parametrising the data in the future.

The last two points were dealt with first: (c) clearly research students and post-docs were the members of the community doing most research work and (d) recent reviews to some extent indicate a move in this direction, though a full implementation of this is a non-trivial task. On the location of the database MRW felt that its success was because it was away from the Rutherford Appleton Laboratory. There there would be greater pressures for the members of the group to work on other things. Moreover the overheads of the project were cheaper at a University than at a central laboratory. However, it was recognised that the database relying almost entirely on one person was a concern for its long-term future. An additional physicist familiar with the database system was needed. The Chairman reported that discussion of these topics would be included in the September review of the project.

Date of the next meeting: The Chairman proposed that the next meeting of the Committee be at the Rutherford Appleton Laboratory on Monday 14th December at 9.30.

The meeting ended at 16.00