

MINUTES of the fourth meeting of the Durham - RAL Database Committee held on Tuesday, May 21st, 1985, at 2 pm in Seminar Room 325 of the Department of Physics, University of Durham.

Present : Drs P.D.B. Collins, R.C.E. Devenish, Prof A.D. Martin (Chairman), Drs C.J. Maxwell, M.R. Pennington, R.G. Roberts, D.B. Websdale and M.R. Whalley

AGENDA (prepared by MRW) :

1. Minutes of the last meeting
2. Progress Report
3. Progress of data reviews
4. Discussion of future plans
including : a) CERN promotion
b) representation at the Kyoto conference
5. A.O.B.

MINUTES

ITEM 1 :

Commenting on the minutes of the last meeting, MRW said he had no success in contacting Krenz about his review. However, it was found that this was not on neutrino cross-sections as previously reported but on neutral currents with little data.

In matters arising from the minutes the chairman (ADM) reported that on the subject of getting a firm commitment from CERN to provide data he had written to Ian Butterworth, rather than the three people suggested at the last meeting. His reply was eagerly awaited. The timing of the sending out of the minutes was discussed and it was proposed that the minutes should contain ACTION statements in the future (ACTION : MRP).

ADM informed the committee that Mrs E.J. Miller, the coding assistant, would be returning from maternity leave on June 1st, 85, and that her temporary replacements had worked well with little, if any, disruption to the coding.

In other matters arising RGR reported that he had sent round a letter about whether there was interest in the Database acting as a repository for lattice configurations. His view was that arrangements for access, for example to the Edinburgh configurations, already existed at the informal level and that this was not a matter for the PDG.

ITEM 2 : Progress report by MRW

More coding has been done than ever before. Durham and RAL have coded 100 papers so far this year and some work on $e e$ to lepton pairs has begun. The pace of coding has been at 2.5 times the usual rate and that there was capacity to allow neutrino cross-sections to be included systematically in the future. MRW reported that Morrison's HERA group were now moving into lepton areas. RGR suggested that he would try to persuade Douglas Morrison to help with these neutrino data (ACTION : RGR).

Continuing his report, MRW stated that there had been 36 users to date this year, roughly the same rate as last year and that 19 had tried the guest identifier and given their names. MRW expressed concern about "hackers" getting into CMS through this guest account and this would be watched for. The guest users were, for example, from Saclay, Bonn and NIKHEF (Amsterdam), and 344 accesses in total had been recorded. MRW had made no significant software changes and so those planned in the December, 84, minutes were still outstanding (ACTION : MRW).

On the question of publicity, the newsletter is now out, but graphics were not mentioned there and it was agreed that this would not be advertised until they were fully ready. A user guide is about to be printed. These and any necessary updates will be sent to all 328 registered UK high energy physicists. This list of potential users was regularly updated by group secretaries in each department. The chairman proposed that a copy of the User guide should be sent to each European University, together with a couple of newsletters (ACTION : MRW).

MRW had given demonstrations of the Database at Royal Holloway College and at Sheffield, which completed his UK tour, so that next September the circuit will be repeated. It is planned that on such visits MRW will establish contact with a computer person in each group with whom to liaise (ACTION : MRW).

On international collaboration, MRW commented that tapes had been exchanged with the Soviet group as usual. Mail via ARPANET to LBL was reported to be slow and MRW remarked that this should improve when the UK joins "BITNET", which presently awaits government approval. Though the Durham/RAL databases can be accessed in the States, the Particle data group at LBL had not yet informed its 6000 "subscribers" of this possibility. PDG(UK) has received from LBL the "current experiments" and "particle properties" tapes. In the printed listing of the LBL report on "current experiments", it says that the relevant database can be accessed in Europe, through contact with MRW and gives no information about the method of access (ACTION : LBL).

ITEM 3 : Data reviews

The NN scattering data compilation by PDBC, Martin Carter and MRW nears completion. This covers all eight reactions encompassed by the name nucleon-nucleon and will cover total, elastic and differential cross-sections, real to imaginary ratios, and polarisations, spin-rotation and double spin measurements above 2 GeV. This review is at the presentation stage, all the numbers being in the Database. The output was being organised and the graphics were being implemented on Numac, by copying the datafiles to Newcastle (ACTION : PDBC, MKC & MRW).

Progress on an e^+e^- compilation : MRW had written to each DESY and SLAC group for data on dilepton production, but had had no replies. TASSO had given the necessary numbers - they tend to publish these anyway. It was agreed that numbers should be read from published graphs and groups asked to approve these. ADM proposed that the rapporteur at the Kyoto conference (Kolanowski) should be contacted to aid the collection of data (ACTION : MRW).

At the last meeting non had suggested hadroproduction in lepton scattering, but after discussion with Peter Renton he found no enthusiasm for this. Instead he proposed to start on a review of photon structure function data. He planned to contact John Dainton, Walter Wagner (who had just written a new SLAC publication on this topic) and Ch. Berger. Such a review would require a page giving details of how each group defined photon-photon scattering events and a little theory would also be presented, if only as a list of references. MRP agreed to assist RGR on this project (ACTION : RGR & MRP).

ITEM 4 : Future projects

A promotional visit to CERN was planned. MRW had written to Gordon Fraser of the CERN Courier and a 100 word article emphasising the international flavour of the Database was proposed. MRW would give an EP seminar in September, 85, timed for the European Compilers' meeting. Before then the software would be cleaned up to make it more compatible with CERN. The hope was that the database could be implemented at CERN on CMS, which is presently on trial there. The database takes some 25 mega bytes of store and this was not regarded as causing any difficulty. It was agreed to contact Chris Jones of DD about this (ACTION : MRW).

The chairman was keen for a review on the fragmentation of heavy quarks to be considered. However, DBW asked about the timescale for such further reviews when already the group had an NN, e^+e^- and photon structure function reviews in hand. Nevertheless, he felt this idea should not be shelved. PDBC said that a list of appropriate data references - complete upto a year ago - existed in Tim Spiller's (University of Durham) thesis and that together with Ann Kernan's recent Physics Reports finding references should not be too difficult. MRW commented that D, D_s and A_c production were already in the database. RCED suggested that the DESY library might be persuaded to find the references to charm production for us (ACTION : DESY library).

PDBC commented that work on the NN review had highlighted the duplication in the different databases. This was historical and MRW said he planned to bring all old NN data into the new database (ACTION : MRW).

Publicity at the European Physical Society Conference at Bari and at the Conference on Lepton-Photon Interactions at Kyoto was discussed. It was agreed that a poster and hand-outs should be taken by committee members to these conferences (ACTION : MRW, PDBC & CJM, MRP & RGR). RGR said he would look into the possibility of a demonstration link to SLAC at the Kyoto conference (ACTION : RGR).

ITEM 5 : Any Other Business

RCED asked the chairman if he had received any report from the grants committee about this year's application. ADM said he had not. As a member of that committee RCED said that immediate worries about the project's viability had abated and that they encouraged the group to keep up the good work. RCED emphasised the usefulness of publicising the database to research students at summer-schools (ACTION : RGR & MRW to continue).

The chairman then discussed the Membership of the present committee. RCED was taking sabbatical leave and wished to resign from this committee, but will continue to assist MRW on the e⁺e⁻ data review. The chairman on behalf of the committee proposed a vote of thanks to RCED for all his stimulating advice. It was proposed that both the new people on the grants committee of the PPC - David Miller and Ian Skillicorn - would be asked to join (ACTION : ADM).

DBW asked about the plans to apply for an Information Technology Fellow to work with the database project. ADM reported that the DES initially had library schools in mind for this, even though the plan to use such a fellow to look to the future development of the database management system came within its terms of reference. After enquiry the DES had agreed that such a project would be eligible under the scheme, but the late closing date for applications meant that most candidates had taken other jobs by then. As a result no application had been made this year, but the possibility would be kept in mind for future years.

The next meeting was provisionally planned for Monday, December 16th, 1985 at the Rutherford Appleton Laboratory (ACTION : RGR & MRW).

The meeting ended at 4.15 pm.

MRP
June 29th, 1985