MINUTES OF THE APRIL 1, 1993 MEETING OF THE USERS EXECUTIVE COMMITTEE


Approval of Minutes
The minutes of the previous meeting were approved unamended.

General Business

Test Beams
Hitlin noted that planning for the revival of test beam facilities, under the direction of Martin Perl, is proceeding well. Pion and electron beams may be available within 18 months from now.

User Occupancy in the Warehouse
Following discussions at the last meeting, Burrows, Hitlin and Band met with Steve Williams, Margaret Helton and Judee Richeson to discuss the level of use of the Warehouse. An occupancy histogram was subsequently compiled which shows that a substantial fraction of the desks in the Warehouse are used on a regular basis. A newsflash from Margaret Helton announced that increased user presence for the SLD and endstation runs has resulted in ALL desks having been assigned through the summer. Kofler added that some SLAC groups had expressed an interest in occupying Building 210 in PEP City, which is presently occupied by users. He noted the lack of security in the Warehouse for equipment such as workstations and printers.

SPC Meeting
The SLAC Scientific Policy Committee will meet on April 9/10. Hitlin will make a presentation on behalf of SLUO.
SLUO Bank Account

SLUO currently has a small sum in a checking account. This is decreasing monthly due to account charges. It was agreed that the residue be transferred to a savings account with no charges.

Project Reports

1993 SLC/SLD Run

Nan Phinney reported on the progress of the SLC/SLD run. Polarisation as high as 65\% has been measured at the end of the linac, and is stable at around 53\% at the Compton polarimeter. Improvements to the machine include the damping ring energy upgrade and arc orbit stability. Arc orbit bumps are being used for spin alignment, and arc spin bumps have been investigated as a way of improving the polarisation transfer. The polarised source has been performing very well, with uptime close to 100\% and re-cesiation being performed once every few days, routinely taking much less than an hour.

Control of the damping ring microwave instability, better ring-to-linac matching, linac emittance control and improved arc vacuum have all helped overall performance. Beam currents are presently just over $3 \times 10^{10}$, which is planned to try to improve to around $3.5 \times 10^{10}$. Running in ‘flat beam mode’ has yielded record luminosities and low backgrounds for SLD. For the past few days the luminosity has averaged over 25 $Z$s/hour, reaching a peak of just over 40/hour. In the past 24 hours more than 500 $Z$s were logged on tape by SLD, about 60\% higher than the best day in 1992. So far almost 5000 $Z$s have been logged this run, effectively during the month of March, which is nearly half the 1992 total. The ‘effective luminosity’ for the measurement of the left-right $Z$ production cross section asymmetry, $\#Zs \times (\text{polarisation})^2$, is already twice the 1992 total.

Plans for a rebuild of the damping ring vacuum chambers in time for the 1994 run are well advanced; new chambers should allow currents of $4 \times 10^{10}$ electrons per bunch through the rings. In addition, an upgrade of the final focus is approved, involving new quadrupole and octupole magnets and improved diagnostic elements. It is hoped that these upgrades will bring SLC to the 100-200k Z/year level. A large-scale rebuilding of the damping rings is not being considered further for now.

Endstation Experiments

Henry Band commented that E142 submitted its first paper on the polarised neutron structure function to Physical Review Letters yesterday. They plan to request a further run after this Fall’s E143 run. E146 is currently running parasitically off SLC and has observed the Landau-Pomeranchuk-Migdal effect.

Computing Needs

Tony Johnson joined the meeting to discuss computing issues. He said that the Computer Advisory Committee, a panel of mainly non-SLAC experts, has yet to issue its final report, although it is expected soon. A meeting of the SIUO
Computing Committee had been held off awaiting the report, but will now go ahead anyway to set the ball rolling for a considered SLUO response. Tony suggested all user groups think very carefully what platforms and devices they would like to see supported at SLAC, and at what level. This will help in negotiations with SLAC concerning a policy on what is to be supported, something which is not clear presently. There is an active SLAC Unix committee, on which Tony is SLUO’s voice. It is clear that conversion of existing software to Unix would involve (SLAC) manpower, so users should consider what their needs might be.

A list of SLUO Computing Committee members is attached. Please contact any of them to make your views known. This is a very important period of transition for SLAC computing, so we want to make sure that the users’ voice is heard, and that the decisions made are optimised for the whole SLAC community!

**Television System**

Hitlin confirmed that the SLAC televideo conference system is up and running. Use of the system is presently on an informal basis, which will continue until demand makes this impractical. All the major national laboratories, and several of the larger universities, now have such systems, and many more are thinking of making the investment. The cheapest models are apparently $15k, with $30-40k buying a standard system. It was suggested that SLAC consider buying a ‘bridge’, which permits more than two nodes to be linked up simultaneously. Presently it is necessary to dial out to SSC, which has such a bridge, in order to make multi-node connections.

**SLAC B Factory**

The discussion turned to funding issues and the President’s budget, in particular relating to the B Factory. The official release will be later this month. We were joined for lunchtime discussions by Leith, Richter and Williams. There was consensus that SLUO members should go to Washington, as last year, to meet with representatives or their staff to make them aware of the importance of maintaining the electron sector in U.S. high energy physics, and in particular to outline the case for the SLAC B Factory. David Hitlin will co-ordinate such a visit, tentatively scheduled for April 29/30.

**ANYONE INTERESTED IN TAKING PART IN THIS EFFORT SHOULD CONTACT HITLIN IMMEDIATELY**

The Congressional recess is from April 2 - 19, so now is a good time to contact your district office and speak to your representative!

**50 GeV Electron Beam**

The directors confirmed that no proposals have been made to the laboratory for endstation experiments requiring a 50 GeV electron beam. They reiterated that such proposals will be welcomed and judged on their merits by the EPAC.

**SLAC Users’ Guide**

Williams showed a draft version of the new users’ guide to life at SLAC. Copies will be circulated to the committee for comments, before release of the document.
next month. The guide attempts to provide useful information on everything from safety issues to proposing experiments, and will be updated at few-yearly intervals as need dictates.

EPAC Members
The new EPAC members are: John Domingo (CEBAF), Persis Drell (Cornell), Gordon Kane (Michigan), Rafe Schindler (SLAC).

SLAC/SLUO/PI Meeting
The SLAC management would like to hold another meeting between the SLAC faculty, the SLUO Executive Committee and some principal investigators from user groups to solicit advice and discuss the direction of the laboratory program. The Committee will suggest names of P.I.s, about 15 of whom will be invited by the directorate to the meeting. A tentative date of May 15 was suggested.

Annual Users’ Meeting
The date of the Annual SLAC Users’ meeting was tentatively set for Friday October 1.

Next Meeting
The date of the next SLUO Executive Committee meeting was set for Monday June 7. Institutional representatives are also invited to this meeting to help propose names for the ballot to replace retiring members of the Committee.

Minutes submitted by,

Philip Burrows
Secretary/Treasurer
Users Executive Committee
SLUO Computing Committee Members
Pat Burchat (PAT @ SLACVM)
Richard Dubois (RICHARD @ SLACVM)
Al Eisner (EISNER @ SLAC.STANFORD.EDU)
Tony Johnson (TONYJ @ SLACVM)
Steve Manly (MANLY @ SLACVM)
Frank Porter (FRANKP @ SLACVM)
Terry Schalk (TAS @ SLACVM)