MINUTES OF THE JUNE 7, 1993 MEETING OF THE USERS EXECUTIVE COMMITTEE


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

General Business

B Factory Status
Hitlin outlined the present situation regarding the B Factory. A review panel will come to SLAC for 4 days, starting June 21, and then go to Cornell. Membership of the panel is still evolving, but it will be chaired by Stanley Kowalski of MIT. The charge is to evaluate the SLAC and Cornell proposals on their individual merits, and to submit a report to DoE by July 7. An unspecified Federal official will then make a site selection and the plan will go to Congress for debate. Hitlin went to Washington at the end of April and reported positive discussions with members of the California congressional delegation, or their aides. If the SLAC proposal is funded there will be a series of workshops starting in the Fall to discuss detector design and form a working collaboration.

Word from Japan is that the Director of KEK is ‘optimistic’ about the KEK B Factory being funded, but the decision by the funding agency will not be made until April 1994.

SSC Status
The date of the congressional vote on funding for the SSC is unknown. On behalf of Walter Toki, who was absent, Jim Brau proposed that the SLUO Executive Committee send a letter to Congress in support of the SSC, and circulated a draft copy. All members present agreed to sign the letter.
1993 SLC/SLD Run

Nan Phinney reported on the progress of the SLC/SLD run. The present photocathode is believed to produce electrons of about 75% polarisation and 62-64% measured at the IP is now the norm. Studies of ‘spin bumps’ in the arcs are planned in an attempt to recover some of the present depolarisation. For the 1994 run it is planned to install a 90% polarisation cathode, which should yield around 75% at the IP.

Running the SLC in ‘flat beam’ mode has proved successful, effectively doubling the luminosity to well over 40Z0/hour at peak. The plan is to decrease the beam overlap area by another factor of two in 1994. The higher luminosity and unprecedented uptime of more than 70% have produced over 33,000 Z0s on tape for SLD so far, well ahead of schedule for the 50-60,000 goal by September 1. There is even a hint of the beam pinch effect at the 10% level in the high luminosity running, and moves are afoot to measure this effect more accurately.

Fabrication of the new damping ring vacuum chambers is proceeding well, as are plans for upgrades to the final focus system. Simulations indicate that the damping ring and final focus transformer upgrades could yield luminosities in excess of 120Z0/hour, maybe over 170Z0/hour with an additional octupole improvement. Installation of the new components in the Fall will necessitate a longer turn-on and commissioning time than in 1993, and the aim is for 100Z0/hour in 1994 production running. The goal is to achieve a rate of 250k Z0/year by 1995. Longer term possibilities include new nose-pieces for dipole magnets in the damping rings to reduce the horizontal emittance, and further final focus upgrades.

Endstation Experiments

Henry Band gave a brief summary of the present endstation programme. E143 should be ready to run by mid-October. The experiment comprises most of the E142 detector, with a new cryogenic NH3 and ND3 polarised target system. The Möller polarimeter at the end of the linac is to be rebuilt to measure the beam polarisation.

E146 ran parasitically off SLC and observed the LPM effect. All agree that the experiment was a great success.

E144 successfully tested a silicon calorimeter in the A-line using a beam of 25 GeV electrons, at 30-40 electrons per pulse. The electron energy is tunable in principle down to a few GeV and further interest or proposals for this facility would be welcomed by the Laboratory.

Computing Issues

Pat Burchat reported that the Computer Advisory Committee has yet to issue its final report to the SLAC management. In view of this, the SLUO Computing Committee has not yet met. The issue of user representation on the various SLAC computing committees was raised. The SLUO representative on the Unix planning committee is Tony Johnson. There was discussion of whether a larger user role would be desirable in assisting SLAC with its plans for extensive changes in laboratory computing in the next few years.
Discussions with Management

We were joined for lunchtime discussions by David Leith and Burt Richter. The main item was the outcome of the EPAC meeting last Saturday. The relative scheduling of the fixed target and collider programs has been changed somewhat from the model of the past two years, to allow longer runs and minimise the switchover time between the two modes. Most of 1994 will be devoted to the SLC/SLD run, with periods for FTFB and E144 included. There will be a fixed target run in the first part of 1995, followed by another year of collider running though mid 1996. The schedule beyond this date has not yet been considered. The upgrade to a 50 GeV electron beam was approved for the E143 run in 1995. An integrated proposal for measuring proton and neutron structure functions was requested from E142 and E143.

The Endstation A test beam facility is operational, and studies are in progress for a test beam in the B-line. Users requiring test beam time are strongly encouraged to submit proposals to the EPAC. The controls system for the test beams is under discussion. Possible options include a sophisticated SLC-style system, or an old-fashioned ‘dial in desired energy’ box controlled by the test beam user. Please send suggestions or ideas to Martin Perl.

Leith reported that the Computer Advisory Committee report on the future of computing at SLAC has been received in draft form and returned to the Committee with comments. The final version is expected within weeks and will be made widely available. Richter and Leith emphasised that more input from users would be welcome on this topic, especially concerning the needs and feasibility of remote computing using high bandwidth links.

There was a brief discussion of the SLAC tele-conferencing system, which Hitlin confirmed was fully functional. In addition to about 10 such installations in the US, similar systems are in place at CERN, Rutherford, Saclay and Pisa, and are expected soon at Beijing and Novosibirsk.

Issuing of Users’ Keys

Margaret Helton, the Users’ Secretary, related a recent incident in which a user had been refused office and building keys on the grounds of being only a temporary resident at SLAC. Leith stated that there was no policy of restricting keys to SLAC staff and encouraged Helton and Hitlin to take the matter up with Steve Williams to ensure a satisfactory key distribution system for users.

Next Meeting

The date of the next SLUO Executive Committee meeting was set for Friday August 6. This will be a lunchtime meeting immediately following the close of the SLAC Summer Institute. User institutional representatives are also invited to this meeting to help propose names for the ballot to replace retiring members of the Committee.
Annual Users’ Meeting

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

Minutes submitted by,

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Secretary/Treasurer
Users Executive Committee