



QUASI - PERIODICAL INTERNAL NEWSLETTER

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SLAC HOLIDAY PARTY NEXT WEDNESDAY

SLAC's traditional holiday festivities have expanded this year to a 90-minute spectacular to be held Wednesday noon at the Auditorium. The program begins at 12:15 with a musical program "Christmas Dreams and Wishes" presented by the SLAC Choral Group. This will be followed by refreshments, prizes, and musical entertainment in the Auditorium breezeway. Shortly after 1:00, Santa himself will join the party.

- A measurement of the decay of the neutral K particle which is very important in trying to understand the implications of the recently discovered asymmetry between matter and anti-matter.
- A search for as yet unknown particles of unknown masses and charges.
- Many important theoretical investigations in modern elementary particle physics."

....on the next six months

"The above achievements were accomplished in the face of considerable budgetary pressure which has restricted the total number of operating shifts SLAC could afford. You may have read in the newspapers that the Congressional committee which monitors the work of the AEC, proposed funds for SLAC in addition to those requested by the President, to make SLAC operations more nearly commensurate with the country's investment. Congress passed these additional funds but during the President's recent negotiations on the budget and a tax bill to pay for part of the cost of the Viet Nam War, our extra appropriation was eliminated and some other funds originally appropriated were also withheld. As a consequence, we will continue to operate on a reduced schedule for the balance of the fiscal year and will probably introduce regular non-operating periods in order to carry out our maintenance and experimental setup operations more efficiently. While this will not be ideal I am convinced that with adequate planning we can accommodate such a program reasonably well."

Panofsky on the past year

"This last year at SLAC (our first full year of operation) has been exceedingly productive in all possible respects. The transformation from a construction project to an operating research laboratory was performed with relatively minor dislocations. During the last year, SLAC

- Established regular scheduled beam operations.
- Attained a beam energy in excess of its design objective.
- Fixed the troublesome "Beam Break-up" phenomenon which had limited the intensity of the beam.
- Activated beams into its two target area buildings.
- Established several secondary particle beams.
- Began runs with its new 40-inch hydrogen bubble chamber.
- Began operation with the new, very large streamer chamber.
- Put its three spectrometers and associated on-line data analysis facility into successful operation.
- Activated the 82-inch hydrogen bubble chamber brought over from the University of California.
- Built a superconductivity magnet with record performance.

....on next year

"In spite of the temporary leveling off of activity for the balance of the 1968 fiscal year (until June 30, 1968), the future of SLAC looks very bright. The AEC is determined to seek funds moving toward full operation in the 1969 fiscal year. We are going ahead immediately with construction of two new major building projects: the General Services Building and the addition to the Central Laboratory. Thanks to all your help, the rapid research start, productivity and general performance of SLAC have been most impressive, and therefore we are assured of as much support as can possibly be obtained in the present national picture."

"In addition, and possibly most important, the physicists from SLAC and other institutions produced a number of exceedingly important research results, some of which were reported at the International Conference proceedings and the SLAC Dedication on September 9. Among these are:

- A series of electron scattering measurements which have extended our knowledge of the structure of the proton to a scale of distances down to 1/100th of the size of the proton.
- A series of measurements of the production of certain unstable particles (the pion and the kaon) which turned out to violate theoretical predictions and whose implications are now being analyzed.

MISCELLANY

The next "orientation" program for new employees will be held at 10:00 a. m. on Thursday, January 4 in the SLAC Auditorium. In addition to discussion of SLAC and its purposes, the SLAC movie will be shown. All new employees and anyone else interested are urged to attend.



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