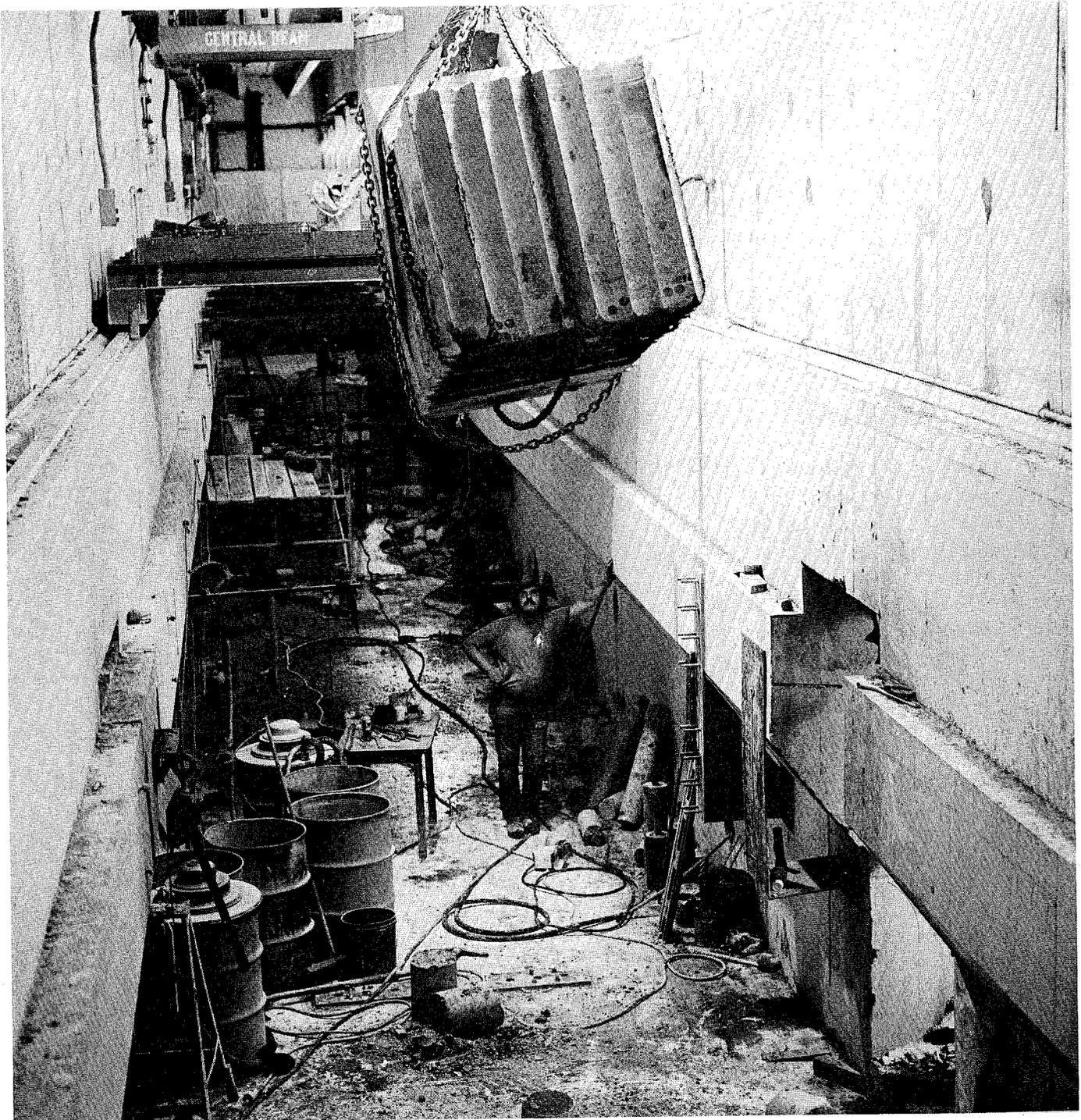


SLAC BEAM LINE

*I have yet to see any problem, however complicated,
which, when you looked at it in the right way,
did not become still more complicated*
— Poul Anderson

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THE SLC TUNNEL BREAKS THROUGH TO THE LINAC

Sixth-Quark Theme**TWELFTH SLAC SUMMER INSTITUTE**

The twelfth annual SLAC Summer Institute on Particle Physics will be held here from July 23 to August 3. The program is designed primarily, but not exclusively, for post-doctoral experimental physicists and is sponsored jointly by the US Department of Energy and Stanford University.

The theme of this year's school is *The Sixth Quark*, selected in view of the productive results of the past ten years' study of the charm- and bottom-quark systems and the recent work to discover the top quark.

The first seven days of the school will consist of background physics lectures:

- *Weak Interactions of Quarks and Leptons: Theory*, by H. Harari;
- *Weak Interactions of Quarks and Leptons: Experiment*, by S. Wojcicki;
- *The Last Hurrah for Quarkonium Physics: the Top System*, by E. Eichten;
- *Production and Uses of Heavy Quark States*, by G. Kane;
- *Experimental Methods of Heavy Quark Detection*, by T. Himel;
- *Imaging Čerenkov Counters*, by T. Ekelöf; and
- *Solid State Precision Vertex Detectors*, by C. Damerell.

The following two days are devoted to shorter talks on current work in the field. The final day of the school will be devoted to the physics and policy topics of special interest to W.K.H. Panofsky, as part of the *Pief-Fest* being held on the occasion of his retiring as director of SLAC (see story on page 3).

NEW PROGRAM COORDINATOR

Clive Field of experimental group BC was named Program Coordinator in March. He is responsible for coordinating the running schedule of *PEP*, *SPEAR*, and the Linac experimental programs. Field takes over the post from Hoby DeStaebler whose term began in November 1982.

**SLC TUNNEL BREAKS THROUGH TO THE LINAC**

High-energy physics is a science of exquisite delicacy and refinement, of precision machinery and white-glove cleanliness. And sometimes it's not.

The cover photograph is an example of the second case. A few weeks ago the machine tunneling the north collider arc arrived at the linac tunnel, separated from the accelerator hall by several feet of concrete. After drilling around the seams of the desired connecting doorway, this block was dragged out, up, and away. (Photo by Joe Faust.)



Burt Richter ponders which of three linear colliders to use in the annual Research Division softball game. The experimentalists played a great game. The full story is in the sporting section on page 6.

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Stanford University operates SLAC under contract with the US Department of Energy.

PIEF - FEST

--- AUGUST 3 and 4 ---

A two-day tribute to W.K.H. Panofsky, retiring as SLAC's Director after more than two decades of leadership and service.

I — PHYSICS AND SCIENCE POLICY

Friday, August 3, 9:00 am to 5:00 pm, Kresge Auditorium of the Stanford University Law School *

Pief Panofsky's career crosses several disciplines in physics and science policy. On the last day of the SLAC Summer Institute, seven speakers will address a few of these topics.

Pief	S. Drell
Accelerator Physics	G. Voss
High-Energy Theory	T.D. Lee
Science & Technology Policy for the '80s	F. Press
Inclusive Lepton Scattering, the Structure of the Nucleon and of Weak and Strong Interactions	J. Steinberger
e^+e^- Annihilation	B. Richter
We Need More Piefs	J. Wiesner

* Since Kresge Auditorium has limited seating, the proceedings of this day of the Summer Institute will also be carried by closed-circuit television to the SLAC auditorium. Laboratory staff wishing to hear these talks should make arrangements with their supervisors.

II — LEGACY OF A LABORATORY

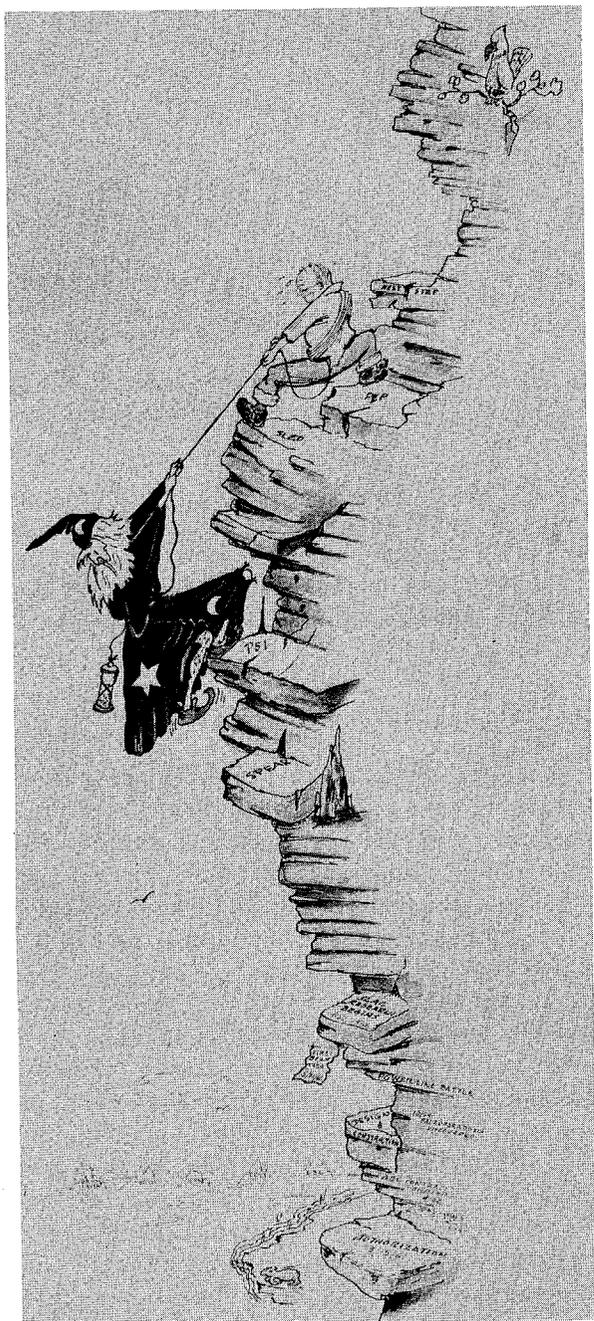
Saturday, August 4, 3:15 pm, SLAC

In a short ceremony at the end of SLAC Family Day, brief tributes will be given on behalf of the US Department of Energy, Stanford University, and Pief's former students.

Master of Ceremonies	B. Richter
Speaking on behalf of:	
Department of Energy	W. Wallenmeyer
Stanford University	A. Hastorf
Former Students	V. Peterson

Panofsky Grove will be dedicated following the talks. This stand of redwood trees was given by SLAC employees as a living symbol of their affection and respect for Pief.

Presentation	Ken Witthaus
Champagne Toast	Bill Kirk



In this 60th birthday cartoon by Bob Gould, Pief leads the SLAC Wizard up a cliff marked by the laboratory's accomplishments.

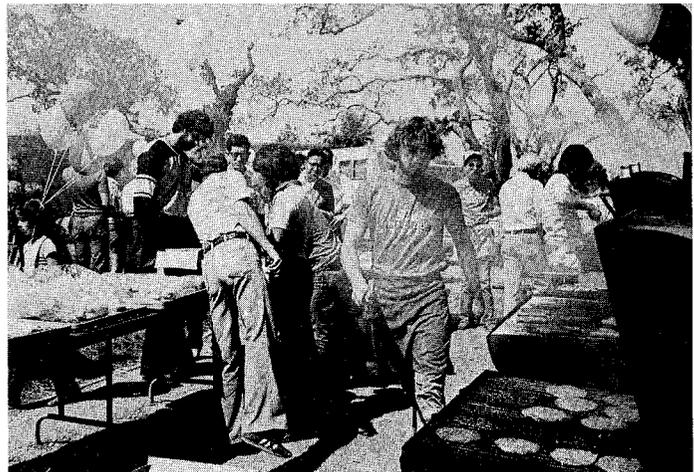
SLAC FAMILY DAY PREVIEW

--- SATURDAY, AUGUST 4, 10:30 ---

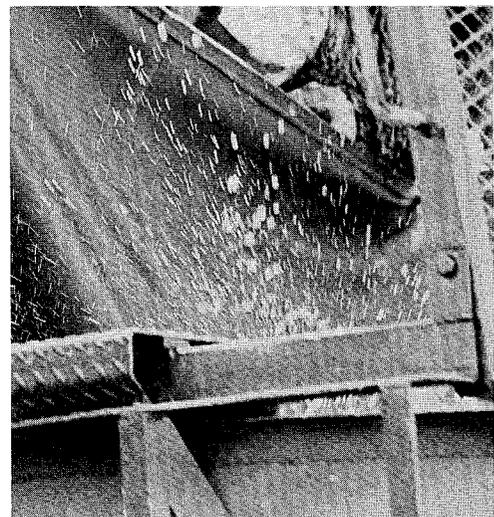
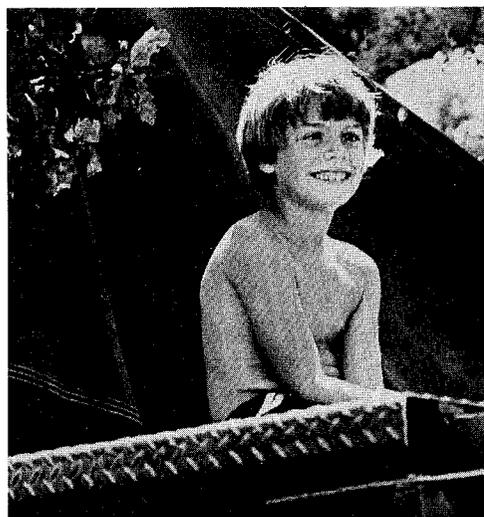
The photos at right were taken at the SLAC Family Day in 1981 and illustrate some of the events planned for this year.

- Games for kids
- Exhibition softball tournament
- Volleyball
- Free steak and hamburgers, 11:00 am to 2:00 pm
- Free soft drinks
- Beer for a quarter
- Computer tours and games
- Tours of SLAC, PEP, and SSRL
- Footraces with prizes
- Train rides
- Live music
- Raffle, radiograms, balloons
- Arts & crafts exhibit
- Fire Station open house
- And more

**PANOFSKY GROVE DEDICATION
AND CHAMPAGNE TOAST — 3:15**



It's even more fun if you can help, and volunteers are needed. Please call Roger Gearhart at Extension 2709.



44 Years; 5 Nobel Laureates

ANNA LAURA BERG RETIRES

Anna Laura Berg worked as secretary for no fewer than five Nobel Laureates during her 44-year association with Stanford University, most of it in the Physics Department and at SLAC.

Five Nobel Prizes! That kind of support deserves a prize itself. Her long and devoted service has won her the affection and respect of a host of her associates, perhaps a greater source of satisfaction than columns of attributions in learned journals.

Anna Laura officially retired from SLAC in 1974, the year of the discovery of the psi particle by the Mark I group at SPEAR. She had worked the previous eight years for Group C which was headed by Burton Richter, who, as a result of that discovery, was to become the last in her collection of Nobel Prize winners. The remainder of that illustrious crew are: Felix Bloch, Willis Lamb, Robert Hofstadter, and Sheldon Glashow.

Anna Laura came to Stanford in 1940 and in 1941 took a job with Professor Paul Kirkpatrick in the Graduate School of Business; at the time he was also acting head of the Department of Physics. She observed and frequently participated in the exciting developments of the following decades. In addition to her Prize crew, she worked with Frederick Terman and W.W. Hansen, two of the outstanding men in the field.



In 1962 Anna Laura dropped out of physics for a while and spent the next four years in the Asian Languages Department. There she was to develop her continuing interest in Chinese language and culture.

Anna Laura has a BS in Dietetics from Utah State and has maintained her interest in cooking, to the delight of her fellow workers who consumed her dishes. She also dabbles in genealogical research and enjoys writing and needlecraft.

Anna Laura was not quite ready for total retirement in 1974, so she joined the SLAC clerical pool and continued working here part-time. Now she is really ready to leave the area and just enjoy her hobbies and the company of her nephew's children — hence a second retirement.

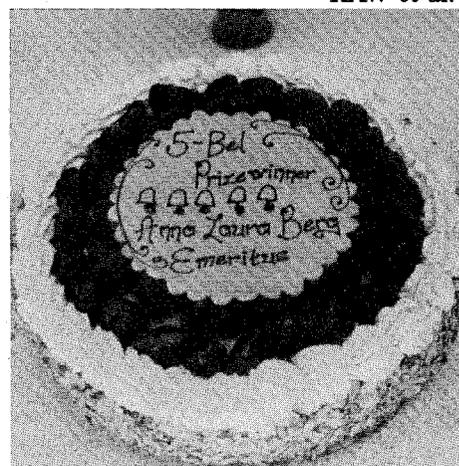
A great lady will be missed.

—HAW et al.



Anna Laura surrounded by admirers at her recent retirement party. From left to right: Back row: Karl Brown, Gene Rickansrud, Dave Coward, Clarence Noyer. Middle row: John Jasberg, Joe Ballam, Rudy Larsen, Yung-Su Tsai. Front row: Mike Lateur and Matt Allen.

Photos by
John Beach



A Prize Cake

THEORETICAL PHYSICISTS SQUEAK BY

On Saturday, June 16, 1984, the Annual Research Division Softball Game & Beer Party was held. This affair features a contest between a team of theoretical physicists and a team of experimental physicists. That fact alone should make it overwhelmingly likely that the experimentalists would win the softball game, although the theorists were of course the heavy favorites in the beer-drinking competition. After all, the record shows 22 experimental victories out of 24 previous games played. You could look it up. There were, however, some mitigating circumstances for this year's game. First was the fact that the theorists' team consisted of an assortment of vigorous young jocks who had actually put in some practice time before the game.



Second was the fact that the experimentalists' team was made up largely of the lame, the halt, and the aged, relieved only by the presence of a few talented offspring. In addition, the theorists several times put their training in applied quantum mechanics to use by causing weakly hit pop-ups to escape the potential wells of the experimentalists' gloves by tunneling directly through to ground. Embarrassing.

So the theorists eked out a crummy victory — their third in a Quarter of a Century. There is no need

Theorist Sid Drell claims the victory as experimentalist Joe Ballam protests that the score is a tie within statistical errors. Phooey.

to give the final score. No one would be interested. Well, maybe experimental families would like to know that their stalwarts scored a big 10 runs. The theorists lucked out with one or two more than that. A few more. Fifteen, actually. 15 to 10. The hell with it.

—A. Experimental Ringer

SATORU KURITSUBO LEAVES SLAC

Satoru 'Sock' Kuritsubo, beloved SCS Operations supervisor has left SLAC to further his career at Syn-
tex.

Sock came to SLAC just before Christmas in 1969, starting as a computer attendant. Sock's development here proceeded in step with the growth of the SLAC Computer Center. The old IBM 1401s were originally located in Building 214, now SLC City. There Sock honed his skills, and in the days of manually loaded drives often won the Operator Tapeloading Olympics.



As a supervisor, Sock was highly esteemed for his

personnel skills: he was firm yet understanding when disciplining, calm and compassionate when under pressure. Sock also promoted camaraderie among the operators by organizing social get-togethers. An avid fisherman, he would often bring in his most recent catch for impromptu fish fries. Is it any wonder he had the respect and love of his associates? After his recent surgery, hardly a day went by without someone asking how Sock was doing and when he'd be back.

A fitting tribute to Sock was expressed by fellow supervisor Neal Adams, who said: "After who knows how many years of exemplary service here at SLAC Satoru Kuritsubo will make his way toward the bigger fish in the ocean. I've learned an awful lot from Sock, not just about work but also about people. He is one of the fairest and nicest people I've encountered. I'll miss all the fish stories (some true, some false — you know how those fishermen are) and that cheerful Howdy!. ... It's been an extreme pleasure working with and knowing you. Sock."

—Rita Klyce