SLAC BEAM LINE

God made the integers, man made the rest.
--*Leopold Kronecker*

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The Crystal Ball detector at SPEAR is being packaged for a tour of duty at the German storage ring DORIS. This compact detector consists of very dense but transparent crystals which provide an exceptionally clear and sharp signal for photons. It has been very successful in looking at events associated with the charmed quark at SPEAR. The German ring, DORIS, operates at an energy between that of SPEAR and PEP and is well suited for looking at events associated with the next heavier quark. The top half of the ball is at the right and Ian Kirkbride, a physicist with the group, holds the train of the bottom half.

SLAC Beam Line, Bin 80
Stanford Linear Accelerator Center

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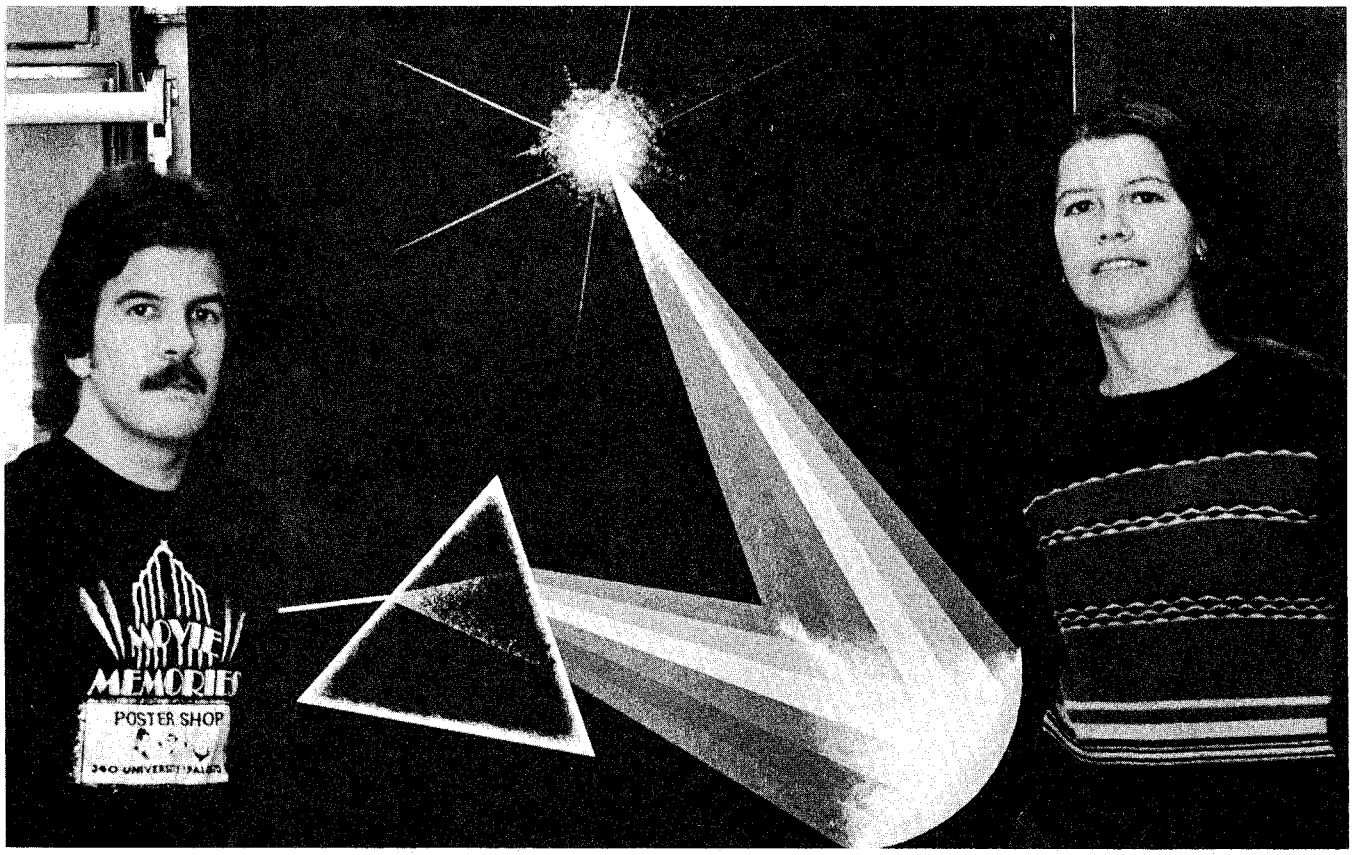


SSRL BEAM LINE ARTISTRY

Norman Silviera and the author flank the mural which they created last fall on a monochromator housing on beam line VIII-3 at the Stanford Synchrotron Radiation Laboratory (SSRL) in the research yard by SPEAR.

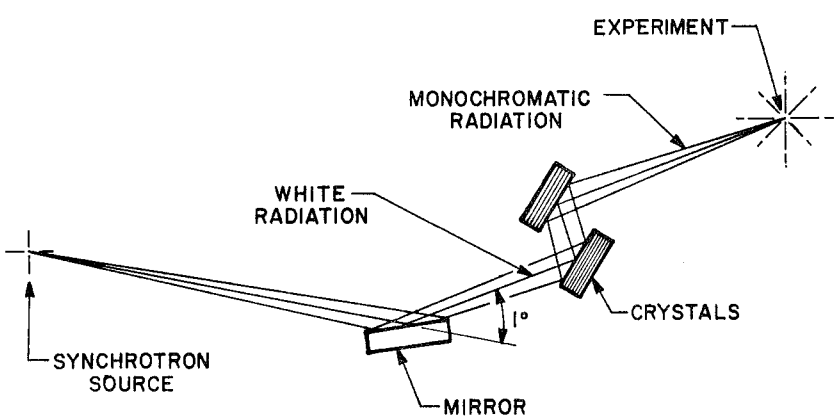
Norm is a graphic artist working as a drafter/illustrator and the author is an x-ray research assistant at the laboratory.

The mural has a black enamel base and the colors of the spectrum were applied with hand-cut stencils and finely ground acrylic paint.

The mural is not a graphic depiction of an SSRL beam line but rather a conceptual play on some of the typical beam line elements. The curved, platinum-coated quartz mirror focuses the beam of synchrotron radiation to a spot about 50 feet from the source. The pair of crystals intercept the beam and select a narrow frequency band of the radiation (equivalent to a color) which is directed to the target point. The crystals are a few inches on a side and are oriented to a precision of about one-thousandth of a degree. The power in the incident beam can be as much as 500 watts, so the first crystal is water cooled.

There are many experiments which use this beam of photons in the range of a few thousand electron volts. The studies are mainly concerned with the atomic and molecular structure of matter, including liquid crystals, glasses and proteins.

-Teresa Pate



SSRL X-RAY BEAM LINE
N.S.

HAROLD A. ZEISS

Many of us lost a good friend and SLAC lost a loyal and dedicated employee when Hal Zeiss succumbed to a heart attack Monday, March 1 shortly after he got home from work. Hal's death came as a shock because he was apparently in good health and worked a normal day the day he died.

Hal started working at SLAC April 7, 1965. He was the second utility mechanic hired for the rotating shift. His dedication and motivation led to a number of promotions until he became Trades and Crafts Supervisor of the Mechanical Utilities Group.

Hal grew up in New Jersey. He graduated from Belleville, New Jersey High School just before the start of World War II. He enlisted in the Navy early in 1942 and liked the Navy well enough to serve 20 years. He retired from the Navy in 1961 at which time he carried the highest enlisted officer rating in the Navy-Senior Chief Petty Officer.

Following Navy Service, Hal worked 4 years for Union Carbide at Moffett Field taking care of a variety of compressors, pumps and high pressure gas equipment. Hal advanced rapidly with Union Carbide rising from Compressor Operator to Operations Foreman.

Hal is survived by his wife Ruth, his son Jim and daughters Judy and Jill, all who live nearby. His mother, a sister and two brothers live in New Jersey. To all of these we extend our sincere sympathy.

-Chuck Hale

ANDREW SABERSKY LEAVES SLAC

After seventeen years of service to SLAC, Andrew has decided to join the firm of Nanometrics in Sunnyvale. Those of us who have worked with Andrew during his tenure here remember him most vividly for his love of sophisticated and state-of-the-art instruments and his extensive knowledge of science history.

He was born in Budapest but spent his childhood in Australia. In 1955, the Sabersky family emigrated to the United States and Andrew attended the University of Michigan in Ann Arbor. He showed an early interest in optical information processing and holography at Conductron Corporation where he worked prior to graduation.

He joined SLAC's Group C Bubble Chamber experiment at the Bevatron in 1965 and also worked with the Beam Switchyard Operations Group as an engineering operator before transferring his talents to SPEAR. Andrew's work there included the design of the SPEAR transport line, optical monitors and other beam diagnostics.

He left SLAC for a year to visit CERN helping at the ISR (Intersecting Storage Rings) in the area of signal-processing problems for diagnostics. In 1976, he joined the PEP Group where he built the PEP optical diagnostics and was the project engineer on the PEP polarimeter.

Areas of special interest and study for Andrew included betatron phase measurements, picosecond measurements and the streak camera.

We will all miss Andrew and are indebted to him for his many contributions to the SLAC storage ring program. We wish him and his family success in this new endeavor.

-Robert Melen

STANFORD HELP CENTER

A HEALTH EDUCATIONAL & COUNSELING SERVICE FOR FACULTY/STAFF & FAMILY MEMBERS ■ GALVEZ HOUSE 497-4577

The hours of the Stanford Help Center's counseling service at SLAC have been changed to Wednesday afternoons from 12-4. If you want to make an appointment to see the counselor, call Victoria at 87-4577. This is a free service to all Stanford employees and their families.

The A&E Building Lobby is the new home of a new service at the Laboratory. It is the SLAC Information Office. Under the direction of Marian Bono (r.), it combines in one centrally located place information and referral services for employees, visitors, vendors, applicants and tourists. Diana Gregory (l.),who shares in the operation, is seen helping Ida Donals. The Information Office is open continuously from 7:30 a.m. to 5:30 p.m., Monday through Friday. A primary function of the office is to be an initial contact for SLAC employees in all kinds of personnel matters, including benefits assistance--x3344.

VIOLA BELTON RETIRES

The Lake Shore Pines Resort in Hot Springs, Arkansas, is under new management. If Viola Belton runs it as well as she ran the SLAC Travel Office for the past ten years it will be a great success.

Viola, a native of Wisconsin, had never visited the South until last summer. To her surprise she loved the country so when she found that a private club located near Hot Springs on Lake Hamilton was for sale she and her husband, T.J., leaped at the opportunity and made the purchase.

Viola started at SLAC in 1969 working as an office assistant in the Crafts Shops. In 1972, she moved to the Travel Office. In her spare time she earned an A.A. degree in Travel Management from Foothill College and a B.S. in Business Administration from the University of Redlands.

Viola is excited about her new life. She expressed sadness at leaving her friends of many years and invited them all to visit her in Arkansas. We wish her and her husband every success in their new venture.

-Sandra Maitri