

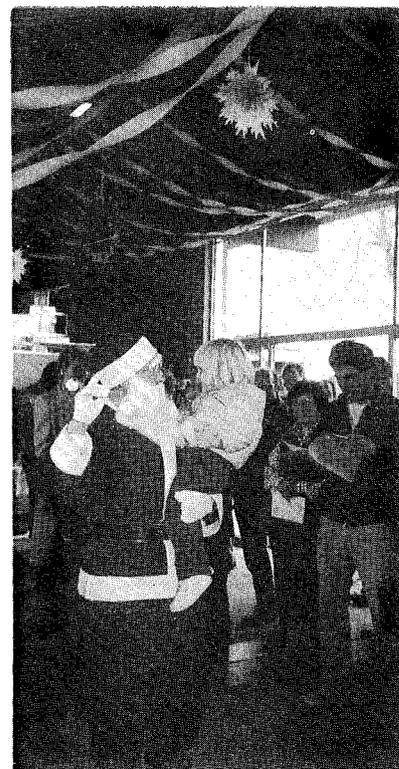
The Interaction Point

Events and Happenings
in the SLAC Community
December 1992, Vol. 3, No. 9



HOLIDAY PARTY BRINGS SANTA, GOOD CHEER, GOODIES

ONCE AGAIN this year, SLAC will be holding its annual holiday party on Friday, December 18, from 11:30 a.m. until 1:30 p.m. All employees are invited to the cafeteria for a buffet-style luncheon featuring roast beef, green salad, fresh vegetables, roll, desert, and choice of beverage. This year's free lunch will be catered by "Elegant Cuisine" of Los Altos. The party continues with cookies and punch in the breezeway. Santa will be there to kick off the festivities with a 1 p.m. drawing for beam trees, See's candies, and other worthy raffle prizes. Look for a special invitation that includes your raffle ticket.



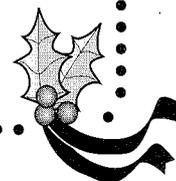
Holiday Greetings!

This year-end holiday season is a time for celebration and a time for looking both backward and forward. The old year, 1992, has been a good one for SLAC. We have made remarkable progress in our scientific research, and our unique machine, the SLC, has continued to pioneer in the development of the new class of accelerators called linear colliders. This was also the year that we welcomed our colleagues and neighbors at SSRL as the new SSRL Division of SLAC.

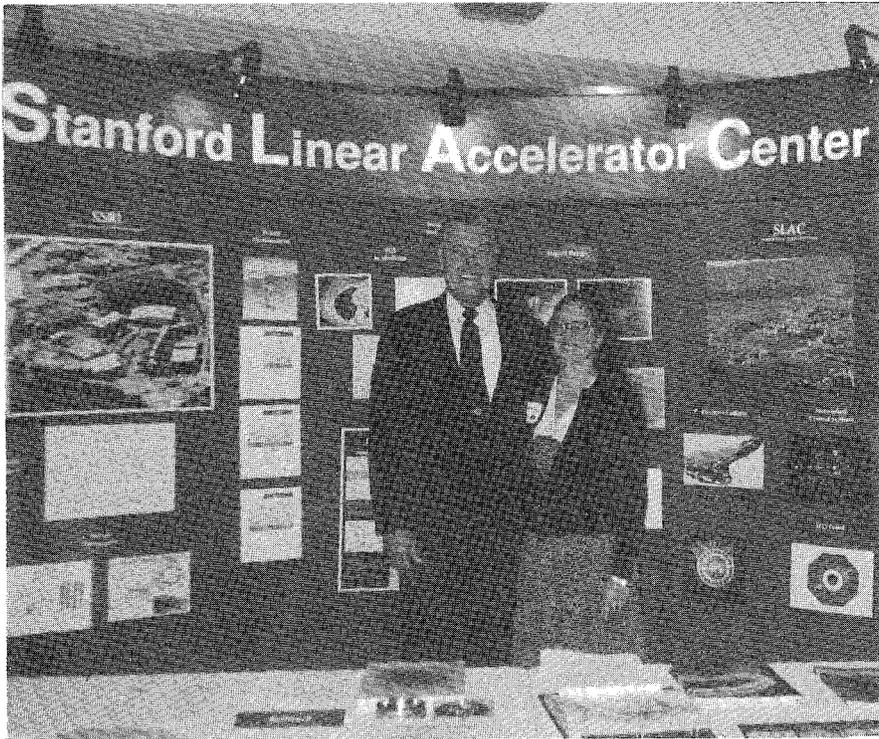
It takes many different people with many different talents to make a laboratory like ours work as well as it does. I am personally grateful to all of you for the skill and dedication you have shown throughout the year. The road ahead, in 1993 and beyond, will bring new opportunities and challenges, and I look forward to an occasion during the early part of the new year on which we can get together to talk about them.

I offer you and your families my very best wishes for the holidays and for a happy new year.

Burt Rieck



ADMIRAL WATKINS ATTENDS TECHNOLOGY EXPO



Secretary of Energy, Admiral James D. Watkins, and Nina Stolar of SLAC at SLAC's exhibit for the National Technology Initiative (NTI). The NTI was a series of shows sponsored by the Department of Energy, Commerce, Transportation, NASA, and the Environmental Protection Agency intended to get industry from many areas around the country in contact with government laboratories to explore ways to transfer technology from laboratory use to commercial products. SLAC participated in the Santa Clara Convention Center show hosted by Stanford University. These shows offered DOE labs a means to show what they do and encourage industry to tap these technologies for possible commercial applications. SLAC's booth featured the accelerator and SSRL and several technologies including klystrons, silicon detectors, and synchrotron radiation analytic tools that may be of commercial interest.

THE SEASON FOR GIVING

RECENTLY, 77 PEOPLE from the SLAC community helped to fill the local blood reservoirs that supply Stanford Hospital, Packard Children's Hospital, and various Palo Alto clinics. Because donations have been running low lately, the need for blood right now is pronounced. This medical community uses about 28,000 units in a given year, making the Stanford University Blood Bank the second largest transfusion service in the country. So as you can see, the 77 people who donated at SLAC gave a much-needed gift. And, for those of you who want to donate again (or for the first time) blood donations will be held on Tuesday, December 22, from 9 a.m. to 4 p.m. in the auditorium lobby. To make an appointment, call Pauline Wethington, ext. 2204.

According to Barbara Adamo at the Stanford Bank only five percent of the eligible population donates blood, and a person can safely donate every 56 days, or about six times a year without a problem. As Adamo says, "Give of yourself; they can't make a substitute for blood yet."

—Trevor Payne

Thanksgiving Shared



Dona Jones with food contributed by SLAC employees

IN THE SPIRIT of Thanksgiving a call for help went out from Dona Jones, Business Services, to provide food baskets for those who would otherwise do without a Thanksgiving meal. Thanks to a lot of great folks here, 45 trainees and their families at the Opportunities Industrialization Center West (OICW) in Menlo Park were given the ingredients for a turkey dinner with all the trimmings. OICW is a private, non-profit community-based program that offers people the opportunity to rise from poverty to become successful members of society.

Mea Culpa

An error found its way into the "Software Piracy — A Crime of Our Times" article in October's *Interaction Point*. The third full paragraph in column two should have read: "Finally, some authors contribute their creations to the public domain so they may be shared freely." Public domain software has a different copyright status from "freeware." The copyright is relinquished for public domain software; whereas, freeware is copyrighted. Both types of software are usually available for free. For an expanded version of the "Piracy" article, see VM Memo #64 "On Copyright and Using Software" (SOFTCOPM MEMO * on SLACVM) or /usr/local/doc/policies/Software-Copyright on UNIX(R).

—Joan Winters

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Welcome Björn Wiik

FAMILIAR FRIENDLY FACE RETURNS (AGAIN)

by Trevor Payne

BJÖRN WIİK IS BACK at SLAC, and he's happy. The hadron electron ring accelerator he worked on at DESY over the last twenty years is coming to life. And his success has been repaid, as Wiik comes to SLAC the heir apparent to the directorship of DESY. This is quite a feather in his cap, although he views the appointment as somewhat dubious. Wiik said "Yah, I'm pretty close," to accepting the position, but not before "a lot of commiseration."

The challenge of running DESY is something that is important to Wiik, and personal. "There is a certain sense of responsibility," he said in his affable and understated manner. "Somebody has got to run the place, and I have a strong feeling of what should be done."

Wiik is also aware of the added pressures the inclement economic climate will provide, as the former wellspring of dollars is somewhat shallower than it has been. Indeed, part of what he is doing at SLAC is thinking about the next generation of linear accelerators, and how high-energy physics will be able to extend itself into the next century: "It's really a difficult situation for physics right now, so it's important to see the laboratory into the future," Wiik commented.

The custom of massive national spending on duplicate machines and technology "is a tradition that has served us well [to date], but one that will have to change," he said. Wiik's words are very well supported in practice by HERA. The collider was not only brought to life by international expertise, but international funding as well. Foreign contributions eventually covered about 15% of the costs, making this is one of the most widespread international physics efforts of its kind, including



Björn Wiik

countries from North America, Europe, and East Asia.

Internationalism is nothing new to Wiik. His route from Norway's craggy west coast to big physics took him across many borders. After high school, Wiik attended a small technical university in Germany, and then from Germany to California. Ironically, if it hadn't been for a poor high school performance, he might not have even made it to Germany. Fortunately, the culture shock of his sojourn at school was tempered by being accompanied by many of his contemporaries—all with bad grades. Wiik explained that it was common for Norwegians to leave their country to study.

In Germany Wiik fed his penchant for physics. During these years his interest was encouraged by a high school teacher and a fortuitous summer job in the science division of a Norwegian research institute where he was exposed to research on nuclear reactors.

In 1964 Wiik came to SLAC after having been recruited to Stanford's Hanson lab while he was completing his Ph.D. It was here

his intimate connection to accelerators and particle physics began.

Once in California, Wiik found himself involved in a variety of projects. Among other things, Wiik worked with Perry Wilson, where he was introduced to accelerator physics, and dabbled at SLAC working with Dave Ritson. In 1972, after experiencing a broad range of physics, Wiik left for the University of Hamburg with visions of HERA in his head.

HERA follows up on work which was done at SLAC during his stay here. It was during this time that the proton's internal quark structure was discovered by a collaboration that included SLAC's Richard Taylor. Since then, the inside of the proton has been much better understood; this new machine should increase the detail.

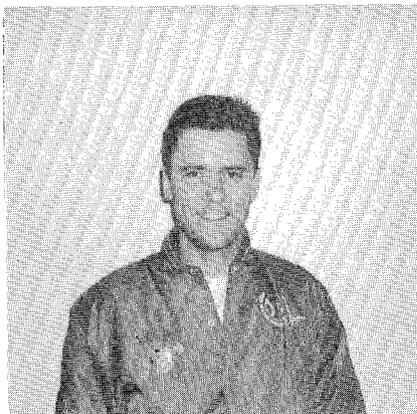
"What you're doing [with HERA] is probing the inside of the proton," Wiik said. "And what you get with this machine is a much larger kinematic range than before." This means that much higher energies can be used to probe than those previously used. According to Wiik, not only can physicists see the proton better, the more powerful accelerator will possibly push physics in a whole new direction. "One thing that HERA is particularly well-suited for," he said, "is to find a new kind of particle."

Some theorists suggest the existence of an independent hybrid particle, combining traits from the two already-known classes provided for in the current Standard Model, the leptons and the quarks: "Some people believe there are also quantum numbers which combine the two—the leptoquark," Wiik said. This would be a whole new class of massive particles.

Harris Leads San Jose All Stars to World Championship

A WORLD SERIES BASEBALL championship—albeit not of the variety won by the Toronto Blue Jays—was nonetheless savored by Mechanical Fabrication Department supervisor Bryan Harris. He and the San Jose All Stars bested a field of 145 entrants from around the world to win the 1992 Men's Senior Baseball League (MSBL) World Series recently concluded in Tempe/Mesa, Arizona.

Harris, the starting pitcher in a critical third-round game against the Denver All Stars, gave up six hits and a single unearned run over seven innings en route to an 8-6 victory that kept San Jose's hopes alive in the championship tournament. The San Jose All Stars, selected from throughout the Peninsula and Santa Clara Valley, went on to post victories over all-star entries from Los Angeles, Long Island, South Dakota, Chicago, and the Former Soviet Union. The championship victory, a 14-4 thumping of the San Diego All Stars, was made sweeter coming over a squad that had beaten them 5-9 in an earlier round. The title game was carried nationwide on ESPN TV and taped for delayed broadcast in Europe, the former Soviet Union, and the Far East.



Bryan Harris is all smiles as he sports a San Jose All Star jacket. Affixed to the right side of his jacket are two medallions given to him by a member of the former Soviet Union squad that competed in the recently concluded world championships won by the San Jose entry.

Not to be confused with the many levels of recreational baseball flourishing throughout the country, MSBL is a seriously competitive brand of ball, with each team (particularly all-star squads) liberally laced with former major leaguers, AAA performers either ascending or descending the major league farm system, and a variety of semi-professional athletes. The MSBL World Series is played on facilities maintained by the various

major league teams for their annual spring training programs.

This past season marked Harris' third season in San Jose MSBL, a 20-team field, and his second straight selection to the all-star squad. A right-handed pitcher with a "wicked knuckle curve" (according to opposing batters) and a good fast ball and slider, Harris closed the past season with a nine-win and four-loss record.

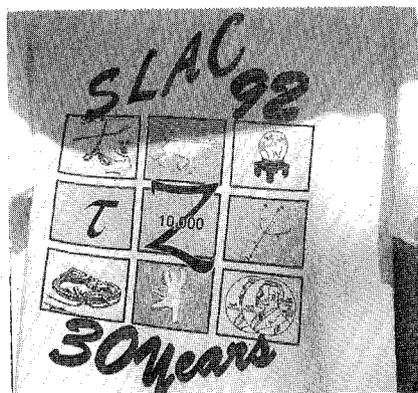
Harris also competed in the softball national championship in 1988 and 1989, and was voted to the all-tournament team at the state softball championships in 1988. An avid snow and water skier, the versatile employee is also a commercially licensed pilot who served two years with the San Mateo Sheriff's Air Squadron.

Serving as player/manager of the SLAC softball team for each of his 14 years here, Harris reminds his fellow employees that SLAC softball is supported primarily from revenue realized through the sale of logo jackets and other SLAC clothing and paraphernalia during the annual Christmas sale now in progress, and he urges anyone interested in participating in softball to contact him.

—Lewis Sign

Holiday Shopping Still to Complete?

ANNIVERSARY T-SHIRTS ALIVE WITH HISTORY, COLOR



Yes, I want to order some of those colorful SLAC 30-year anniversary 100% cotton T-shirts:

_____	number	medium	@ \$6.00	=	_____
_____	number	large	@ \$6.00	=	_____
_____	number	extra large	@ \$6.00	=	_____
				Total \$	_____

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