10 Foreign Countries Represented
SUMMER INSTITUTE ATTRACTION 269

by Nina Adelman Stolar

THE SLAC SUMMER INSTITUTE (SSI) is an annual activity that brings out the best of the laboratory. With substantial new results from hadron-hadron and electron-positron colliders, the general theme for this year’s summer school was “Gauge Bosons and Heavy Quarks.” The format of the Institute is two separate sections—a seven-day school of a generally pedagogic nature, followed by a three-day topical conference. The School consists of lectures each morning, tours of the various experiments in the early afternoon, and organized discussion sessions with speakers mid-afternoon. The Topical Conference consists of invited talks from various experiments and theoretical results of current interest in high energy particle physics.

The program is designed primarily, but not exclusively, for post-doctoral experimental physicists. Twenty-seven speakers covered a wide range of related topics. According to Michael Riordan, Science Information Officer, the summer school is “an opportunity to review [these topics] in more depth than experimental physicists are normally able to do.”

At this international gathering SLAC hosted students of physics ranging from graduate students to postdoctoral visitors representing 10 different countries. Out of the 269 participants, 125 were representatives of SLAC and the local user community. Foreign countries represented included Italy, Switzerland, Japan, United Kingdom, West Germany, Canada, Brazil, France, Spain, and the Soviet Union.

The highlight of the Topical Conference was the detailed presentation of new results from the four major LEP experiments at CERN. According to David Leith, co-chairman of the Summer School, they provided “beautiful, if somewhat boring, confirmation of the Standard Model.” Commenting on another interesting development he added, “Recent results from CDF [at Fermilab] show the first clues of the potential to study B physics at a hadron collider.”

The success of an effort of this magnitude depends on many individuals throughout the laboratory. The usual team players came through once again, and there were new players who responded

(cont’d. on pg. 4)
ON THE SURFACE there is nothing unusual about a physicist from a foreign country coming to SLAC to work. You’ve seen them around (they’re a dime a dozen), but what is unusual is an accelerator physicist from Mexico who comes to SLAC to study because there are no accelerators in his country. Such is the case with Armando Antillon, a young, soft-spoken accelerator theorist from the University of Mexico at Cuernavaca. Armando, however, is no stranger to this country, having worked as a postdoc at Brookhaven National Laboratory from 1983 to 1986 with Max Cornacchia, presently head of storage ring operations at SLAC, Mel Month, and Sandro Ruggiero.

Armando, one of a handful of accelerator theorists in Mexico, recently came here for four weeks to study nonlinear mechanics with Ron Ruth and Bob Warnock. Specifically this means studying how particles move and behave in an accelerator. Armando explained that since there are only a few medical accelerators in all of Mexico, there are almost no opportunities for a high-energy accelerator theorist, like himself, to remain current, so it is necessary for him to go places where other scientists are in the forefront of their field, such as the Accelerator Theory and Special Projects group led by Ron Ruth. For Armando, however, the lure of his profession is not leaving Mexico to study but rather the hope that some day things will be different. He looks forward to the time when Mexico will be able to build an accelerator for basic research, and even though all odds seem to be against it, he mentions that some underdeveloped countries have already begun construction of a synchrotron light source. The important thing for Armando, however, is that he work within Mexico to try to foster greater collaboration between universities there and national laboratories here, such as SLAC. If he succeeds at this one goal, he may be able to interest students in studying accelerator physics so that Mexico will have scientists with the knowledge of how to build an accelerator when that time arrives. Presently as an accelerator theorist in Mexico, Armando also does research in other fields of mathematical physics.

Bob Warnock, who feels accelerator physics does not get the attention it deserves in university physics departments, is pleased that Armando is trying to start such a program at the University of Mexico. Only three or four American universities have PhD programs in accelerator physics now, and the graduates they produce are much in demand. Both Bob and Ron are looking forward to research collaborations with Armando, and, as Bob says, “Long distance collaborations with electronic mail and computer hookups actually have some advantages. With a time delay to contend with, you think a little harder about what it is you really want to say.”

Armando’s stay here was supported by the Institute of Physics at the University of Mexico and CoNaCy (National Council for Science and Technology).

—Rene Donaldson
MS. BENEFITS (Marian Wehking) TO LEAVE

WHAT WILL LIFE BE LIKE in Pine Grove for Marian Wehking, Contributing Editor of The Interaction Point, when she and her husband Ray move there next month? Picture, if you can, Marian meandering over two rolling acres of land dotted with oaks, cedars, and ponderosa pines or looking out from a two-story house in the Sierra foothills onto hand-built stone fences, terracing, fruit trees, and a distant view of smog-shrouded Sacramento.

For those of you who know how vivacious and energetic she is, it may not sound “in character,” but Marian is more than ready for this period in her life and is going to enjoy it to the hilt. In fact, she has a head start on it because she and Ray have been making trips to Pine Grove (about 10 miles from the famous Mother Lode town of Sutter Creek) every spare weekend for the last year and a half. They even have a potato patch there that they have managed to keep alive from San Carlos!

Marian, who has worked in Benefits for over ten years, started the “Personnel Newsletter” in 1984 and through it kept employees informed not only about benefits but also about blood drives, abandoned cars, and events. This monthly newsletter was recently incorporated into The Interaction Point with Marian as Contributing Editor.

No stranger to newsletters and publishing, she edits the “The Sluice Box,” a quarterly newsletter for Claypipers, a melodrama group where she met Ray.

Marian’s replacement in Benefits, Betty Strickland, has already transferred from the Stanford Payroll Office to begin her training, so if you have any burning questions, better catch Marian before she leaves August 31. And if you catch her, be sure to ask about her hammock and little red wagon in Pine Grove.

—Rene Donaldson

Using Technology to the Max

INTERACTION POINT ALL COMPUTERIZED

THIS ISSUE OF THE INTERACTION POINT MARKS A MILESTONE in computer assembly. The entire issue was prepared on a Macintosh IIcx with 8 megs of RAM and an 80 meg hard disk. Photos were scanned, put into Photo Shop for enhancement, and then placed into PageMaker 4.0. High resolution negatives were then generated at a service bureau on a Linotron and given to the printer. The photo by Shonnese Guion on page 7 was taken with a still video camera and placed into Photo Shop.

This has been an experiment for everyone involved. Terry Anderson, Graphic Arts, was responsible for the scans, and while Tom Nakashima may not recognize some of his photos, we think this is the “way to go.”

—Rene Donaldson

ODE TO AL ASHLEY—The SLAC Day at the Stick was again a huge success: the seats were great; the buses comfortable, the drivers courteous, the Giants won, but best of all was the weather. Thanks again, Al, for a wonderful day! Let’s do it again next year.

—Tineke Graafland

BENEFITS

Car Insurance/Credit Union Reps Visit SLAC Monthly

Remember, representatives from both Stanford Federal Credit Union and California Casualty Insurance visit SLAC on the fourth Wednesday of every month. You will find Margaret Wold (SFCU) and new California Casualty representative, Valerie Cregan, in the Auditorium lobby or breezeway from 3-4 p.m. ready to give you more information about their companies.

Tuition Grant Program Applications Due

Now is the time for eligible* employees to complete applications for Stanford’s Tuition Grant Program for their dependent children who plan to attend undergraduate school in the fall. Program guidelines and application forms are available in the SLAC Benefits Office, A&E Bldg., Room 236.

This scholarship program provides a benefit of up to one-half of Stanford’s undergraduate tuition amount toward the cost of the child’s undergraduate tuition at any eligible college or university in the world. The maximum tuition benefit for the 1990–91 school year is $7,140.00 (half of Stanford’s tuition of $14,280).

Be sure to return your completed application to SLAC Benefits (Bin #11) to avoid delays in processing.

*Eligibility: completion of five years of continuous full-time service with Stanford. Must work full-time while child attends school.
Kudos to Staff for SSI Success

NINA ADELMAN STOLAR, Public Affairs Manager, lent her skills and time organizing the enterprise and coordinating the various tasks and timelines necessary to keep things running smoothly. Eileen Brennan, Group EB, was on maternity leave for several months, returning in time to support the summer school activities. Andrea Chan, Group EH, organized the SPIRES database of participants and trained staff on tricks of the Macintosh computer. The Group EB Secretary (first Jane Buscemi, followed by Pat McDonough and Sally McFadden) provided clerical support. Lilian Vassilian provided the continuity from previous years while enabling the staff to take shortcuts and improve things where possible. Experienced helpers Michelle Moureaux and Lara Vassilian assisted in the preparation of materials for the participants as well as the daily activities necessary over the two-week period.

Audiovisual support and bus driving services were provided by Chris Courtney, Lianne Davis, Bruce Hemingway, Daniel Knop, and Neil Strand of the Public Affairs Office. As usual, Herb McIntyre, Laboratory Electronics Pool, was the one behind the scenes assuring proper functioning of equipment and assisting the staff. Raul Garcia, Facilities Office, was probably the “MVP.” His main job of keeping the Auditorium environs sparkling clean went a long way to impress the visitors—he assisted with everything from print room runs to standing in on the video cameras in the control room.

In keeping with recent tradition, terminals were provided for the participants use. Ken Martell and Ron Barrett, both SCS, rallied their colleagues to provide each visitor with a SLACVM id. Consultants were also available to answer technical questions.

Special mention and gratitude for their support go to Louise Addis and Pam Reid, Library; Nick Arias and Kathleen Waters, Print Room; Vani Bustamante, Kevin Johnston, and Sylvia MacBride, Publications; Cathie Dager, Mark Barnett, Teresa Downey, Charlie Granieri, Diana Gregory, John Halperin, Fred Hooker, Don Pelton, Tim Streater, Mike Sullenberger, and Joan Winters, SCS; Margaret Helton, SLAC Users Office; Karen Krieger, Stanford University; Alex Langnau, Theory Group; Bernie Lighthouse, Information Services; Harvey Lynch, SLD; Tom Nakashima, Group EE; Jeanne Rogers, Group EI; Jim Spencer, Accelerator Theory/Special Projects; Anne Warren, Directors Office; and Pauline Wethington, Public Affairs.

SSI UTILIZES TALENTS OF MANY

The 18th annual SLAC Summer Institute opened on Sunday, July 15, with a reception held at the Stanford Rodin Sculpture Garden. Classical music by the Rosewood Ensemble drifted underneath the tents where a buffet was served.

Participants converse at one of the several informal social events held in connection with the Summer Institute.

enthusiastically to the call for help. David Leith and Gary Feldman were joined this year by David Burke, Experimental Group J, and Lance Dixon, Theory.

Afternoon discussion sessions were facilitated by 18 of the local participants. Provocateurs included Pat Burchat, UC, Santa Cruz, and Chris Hearty, LBL. SLAC was represented by Tor Rauenheimer, Accelerator Theory & Special Projects; John Seeman, Accelerator Department; and Adrian Cooper, Isi Dunietz, Yosef Nir, Dan Schroeder, Brian Warr, and Eran Yehudai, Theory. Other SLAC Research Division provocateurs were Gary Godfrey, Group EA; David Muller and Constantine Simopoulos, Group EB; Bob Jacobsen, Group EC; Don Fujino, Group EH; and Chris Adolphsen, Tim Barklow, and Mike Hildreth, Group EI.
SUGGESTION SYSTEM IMPLEMENTED; 32 RECEIVED

THIS IS A PRELIMINARY REPORT on the new Suggestion System ("preliminary" because we’re just getting started, and it will probably evolve). The new system was established via a memo from the Director to all hands, with an effective starting date of July 16, 1990. As of this writing, a total of 32 suggestions have been received, so initially they are coming in at a rate of about one per day.

Suggestions can be submitted either by E-mail to the VM account SUGGEST, or by regular interdepartmental mail to Bin 1000. Suggestions can be submitted anonymously or with the suggestor’s name included (nonymously ?). If the suggestor is known, a specific response will be made to that person, probably within a couple of weeks, either by a member of the Suggestion Committee or by someone that the Committee has referred the suggestion to. Please note that suggestions having to do with personnel or safety matters are handled better through established channels.

The Suggestion Committee consists of Alex Harvey, Personnel; Bill Kirk, Information Services; Lee Lyon, Personnel; Hugh Steckol, Business Services; and Steve Williams, Research Division.

The job of the Committee is to receive, keep track of, and evaluate the suggestions, and then to take whatever action seems appropriate. That usually means passing on the suggestion, with or without a recommendation, to someone at SLAC who is better able to handle it. Sometimes a suggestion is either so obviously a good idea or so obviously impractical that we decide to handle it ourselves.

In this first report, we want to give a flavor of the kinds of suggestions that have been made so far by citing a few examples. We take the liberty of giving a short-hand paraphrase of the suggestions and of the responses.

**Suggestion #1.** Use the term “Mailstop” instead of “Bin” for internal SLAC mail addresses. **Response:** Seems like a good idea. Being studied.

**Suggestion #4 and #15.** Publish the list of suggestions and their resolution quickly. **Response:** OK, that’s partly what we’re doing here, but so far at least we don’t think we’ll publish every suggestion and every response.

**Suggestion #9.** SLAC’s Institutional Plan, updated yearly, is a good overview and should be available more widely within SLAC. **Response:** Good idea. When updated, around November, the new Institutional Plan will be announced in *The Interaction Point* with information about how to obtain a copy.

**Suggestion #10.** Given the apparent frequency of water-related problems in the maintenance of the SLC, shouldn’t there be by a systematic program to replace old plumbing? **Response:** Yes. In fact, this very question is now being studied by a small group from the Technical Division, with a view toward eliminating the most harmful occurrence (wetting the damping ring magnets) by the end of the year. *(Note: This suggestion is the only one received thus far that is solely concerned with technical matters.)*

**Suggestion #12.** Have open meetings of the Suggestion Committee. **Response:** Probably not. At the risk of seeming paternalistic (again ?), for the moment we don’t think it’s a good idea.

**Suggestion #13.** Make videotape recordings of important SLAC seminars, meetings, etc., so people who missed something can borrow the tape. **Response:** Already being done, but needs some work to improve the system. Should be able to borrow such tapes from the Library, just like books. System should be in place soon.

**Suggestion #14.** Encourage suggestors to make suggestions for specific, limited actions. **Response:** We hereby encourage suggestors to make suggestions for specific, limited actions.

**Suggestion #16.** Let’s have an updated picture book of all SLAC employees, like the ones we had in the good old days. *(The last update seems to be 1981.)* **Response:** We like the idea but worry about the cost and the mechanics of processing 1500 people through a photo session and putting together a book. It’s being considered.

**Suggestion #18.** Have a once-a-month sale at the salvage yard of scrap metal and perhaps other materials that SLAC now sells to scrap dealers; willing to help organize; done at other labs. **Response:** Not settled yet. Being evaluated.

**Suggestion #20.** Clean up parts of the North Access Road by the Klystron Gallery to make it safer for the joggers who use it. **Response:** Yes, will do.

**Suggestion #21.** Make a footpath around the side of the Sector 30 gate. **Response:** Yes. Done.

**Suggestion #27.** Have a “beer bust” on Friday afternoons, preferably at the Department level. **Response:** Such things happen from time to time, usually to mark some special occasion. The incentive to organize parties is left up to the individual Department heads.

**Suggestion #29.** Put the calendars for each of the conference rooms on VM to simplify finding an available room. **Response:** This has been asked for and promised before, but not carried through. Clearly a good idea. Have to find people to do the work of thinking and programming.

*For the Committee—Bill Kirk*
SLAC HOSTS 27 FROM CLARK ATLANTA UNIVERSITY

TWENTY-SEVEN STUDENTS and sponsors from Clark Atlanta University’s Mathematics, Science and Technology Education and Research (MASTER) Institute toured SLAC and Stanford on Thursday, July 19. SLAC was the first of several Department of Education sponsored visits to graduate schools and research facilities. Their visit to California included SLAC, Stanford University, and the University of California, Berkeley. Last year students toured Argonne National Laboratory.

Students met with SLAC’s Summer Science Program (SSP) students and staff for an exchange of information. Doug Dupen provided the group with an introduction to SLAC including slides and a personal tour of the facility. Linda Wells, Assistant Director of Programs for the National Consortium for Graduate Degrees in Engineering and Science (GEM), made a presentation on “Getting into Graduate School” and explained briefly the relationship between GEM and SLAC. Roger Brooks, a research associate in the Theory Group, gave an introduction to the research done here.

The group visited Stanford University where Clayton Bates of the Materials Science Department hosted lunch at the Faculty Club. Noe Lozano of the Engineering Department discussed graduate opportunities and admissions procedures at Stanford. After lunch the students heard from several Stanford graduate students, including Al Green, the director of SLAC’s SSP.

The purpose of the MASTER Institute is to increase the number of qualified minority college graduates entering and completing science and mathematical based research degree programs. The target population includes currently enrolled college juniors and seniors. The program allows students to participate in research activities under the direction of a research faculty member at Clark Atlanta University. Students have a work assignment and attend seminars and tutorials during the eight week program. Students are eligible to receive college credit for the summer intern program.

Student and sponsor responses were enthusiastic throughout the visit. The day was a positive experience, offering the students a chance to learn what SLAC and Stanford University have to offer.

—Beth Raines

Ellie Belton to Enjoy ‘the Good Life’

ELLIE BELTON, a Director’s Office secretary for several years and a SLAC employee for longer, retired recently “to enjoy the good life and to take time to smell the roses.” When she “feels like it,” she plans to travel and to visit her daughter and granddaughters in Atlanta.

Ellie also plans to keep up with her health club and walking. Many of you will remember that she always donned tennis shoes before leaving the Central Laboratory Building to run errands throughout the site. One reason that she will be so missed is that she brought a kind smile and cheerfulness wherever she went. We hope to see her from time to time in the future working with the clerical pool.

Director Burt Richter and Ellie at Ellie’s ‘good-by’ party.

Ellie Belton to Enjoy ‘the Good Life’
ALL WORK AND NO PLAY—NOT SO!

THIS ALL TOO FAMILIAR CLICHE was the farthest thing from the summer students' minds on Thursday, July 26. No one had any intentions of becoming dull girls and boys. As long as the aroma from the barbecued hamburgers and hotdogs filled the air, work was on the back burner. All the way out in Sector Six, there were no distractions to interrupt the fun.

Quite a few students made the laborious trek up the hill to the picnic area where music played and where big trees provided shade from the beating sun. Because Summer Science Program (SSP) participants were also invited, some of the those present had made a much longer trek than up the hill. They had come from all over the country. There were representatives from North Carolina, Louisiana, Mississippi, and a slew of other states. But SSP students weren't the only ones present at this get-together—summer employees made their own impact on Sector Six. But no matter whether from the East, the Midwest, or good old California, all the students had one thing in common: SLAC.

The picnic tables may have been a little old and dusty, but no one seemed to mind as they sat around conversing and getting to know one another. Being careful not to talk with their mouths full, the students spoke of the latest dances, their schools, and their own personal interests. SSP students from out-of-state compared the Bay Area to their hometowns and discussed the sights they had seen since arriving in California. Local students gave helpful tips on other sites the out-of-towners should see and where they should go to have fun.

After the food had been well digested, the students thought they'd do the dying grass a favor and hold a water balloon toss. It's not the world's most competitive sport, but there were still winners and losers. The winners won the right to claim that they had won, and the losers could at least say they had helped water the grass. But while some students were helping the grass, there were a few others stomping it into the ground. Three students danced and sang to the hype tunes from the cassette player.

It was a fellow student who came up with the idea for the picnic. Shawn Klaisner, the head organizer, thought “the students were so separated” that the picnic would foster more unity. Shawn did not carry the picnic basket alone. He had plenty of help from other eager students: Tony Tilghman, Matt Ball, Chris Miller, Dave Hackel, Ann Cass, and Jen Von Pivva. These students of course should be recognized and thanked, but it took all the students to make the barbecue a success.

-S hornesse Guion
TWO SLACers COMPLETE SAN FRANCISCO MARATHON

MIKE DISALVO, Installation, and Bob Kershaw, Digital Maintenance, were two of the 3000 who completed the San Francisco Marathon on Sunday, July 1, and they have medals to prove it. Mike is a veteran of 12 marathons, having run the SF Marathon three previous times. For Bob, however, this run was his first, and not his last, marathon. He was surprised at how “easy” it was to complete the 26-mile course in 4 hours and 22 minutes.

Mike was Bob’s coach for several months before the marathon, encouraging, cajoling, and setting the training schedule which for both runners might include a long 12- to 20-mile run on the weekend with a 4-mile run on Monday with alternating 4-mile and 8-10 mile runs during the rest of the week. For Mike, a winner of the SLAC race in 1987 and a veteran of three marathons already this year, the training is anything but minimal, but for a newcomer like Bob, it is even more rigorous.

Feeling he needed a little extra incentive, Bob bought an automatic breadmaker at Price Club, and it has provided the extra nudge required to stick to his training schedule. Recipes include French, raisin, and wheat bread. One double loaf takes about four hours, so Bob can start it in the morning and have it “oven baked” when he returns from running, whether it be up to the Stanford “dish” or to the end of the accelerator and back. Who wouldn’t run a little faster knowing that a loaf of warm, homemade bread is waiting “just around the next mile.”

What led Bob to consider such torture as running a marathon? Well, when Greyhound was on strike, he had to get from San Francisco to home, and clad in work clothes and carrying a coat and portfolio, he chose the only method available: running. He had run from Stanford to Belmont before but never from San Francisco to Belmont, and he thought if he could do that, then surely he could finish a marathon! His hunch proved correct. “And the secret to not getting blisters,” Bob said, “is to wear two pairs of socks.” And the cure for muscle spasms? “a long, hot-as-you-can-stand bath afterwards.”

Mike, who also attends Foothill College nights to earn an electronic degree, finished the SF Marathon in 2 hours, 54 minutes, 15 seconds. While this time sounds phenomenal to non-runners, Mike said that his time in the 1987 Boston Marathon was 2:47. The SF Marathon starts in Marin County, crosses the Golden Gate Bridge, goes through the Marina District, onto The Embarcadero, over the Hayes Street hill to Golden Gate Park, and then south to Lake Merced, around it, and onto the Great Highway, finishing up at the polo fields near the windmill on the Great Highway. Does Mike feel good about his running? You bet. Has he ever experienced a ‘runner’s high’? “I am still wondering about that,” he comments.

Way to go, guys! Keep up the training. When you need an additional incentive, there are always automatic ice cream makers.

—Rene Donaldson

Pick-up Volleyball Played on Wednesdays

PICK-UP VOLLEYBALL GAMES are held Wednesdays late afternoon on the grass in front of the Central Laboratory Building. As a matter of fact, most of the members of the winning Colliders (mentioned in last month’s issue) were recruited from these weekly games. Watch out though—Chang Kee, team captain, says that the average age of the Colliders “was about ten years older than others and its members were all supposedly nerdy physicists, especially the high energy ones.” For further information about participating, contact Dave Coupal, ext. 3547.