

# LNS NEWS

*Sept '82*

Lab. for Nuclear Sci.  
M.I.T.

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## NEWCOMERS TO LNS

Dr. A. Baha Balantekin - (CTP) is a recent Ph.D. graduate of Yale University. Currently his research interests are in studying the coherent state and path integral techniques and the investigation of supersymmetries in nuclear physics.

Dr. Yusuf Civelekoglu - previously held an appointment with the University of Heidelberg and is now Sponsored Research Staff. He will be working with Prof. Deutsch on x-ray diffraction studies for proton crystallography and feasibility studies relevant to constructing a detector for solar neutrinos.

Alan Dubroc - Senior Secretary has returned to work with the Linac Group. Alan is a graduate of the University of Southwestern Louisiana and is fluent in French.

Dr. Charles Horowitz - has recently returned from the Niels Bohr Institute, Copenhagen where he was part of the MIT-Niels Bohr Physics Program and is Sponsored Research Staff at the CTP.

Stephen Into - a NU Coop student returned to work September 14th.

Dr. Alain Magnon - is on leave from CEN, Saclay and is currently working at Bates on the parity experiment with the users from Yale University. Dr. Magnon is Sponsored Research Staff.

Dr. Peter J. Mulders - is a nuclear theorist who is working at CTP as a Sponsored Research Staff member. Dr. Mulders, from the Netherlands, and previously held a post-doctoral position at Los Alamos.

Dr. Gordon Semenoff - (CTP) Sponsored Research Staff, was awarded a NATO fellowship. Dr. Semenoff's research has consisted of an investigation of the structure of quantum field theories with extended objects and spontaneous symmetry breakdown.

Dr. Cheuk-Yin Wong - (CTP) Sponsored Research Staff is a visitor from Oak Ridge National Laboratory, Oak Ridge, Tenn. Dr. Wong will be here for the academic year.

## PROMOTIONS

Richard Ackerson - to Sponsored Research Technical Staff. Mr. Ackerson was responsible for the repair of the injector high voltage system, and has taken on the responsibility for all control, power, and signal cabling for the accelerator recirculator installation.

K. Ingvar Blomqvist - has been promoted to Principal Research Scientist. He has played a vital role in the design and bringing on-line of major new experimental apparatus, particularly the medium energy proton spectrometer (MEPHS), all part of a major equipment implementation program for the Bates "Second Experimental Area".



## PROMOTIONS CONT'D

John J. Byrne - to Tech. B. (mechanical) Service Staff Bates. John is from Malden and he started in the Lab in the Machine Shop in 1979.

John E. DiFrancesco - to Tech. B. (mechanical) Service Staff at Bates, started with the Lab in 1978 as a stock clerk.

Stephen Picardy - to Tech. B. (maintenance) Service Staff at Bates, Steve started with the Lab in 1980.

Lauritz K. Solheim - Proj. Tech. (electronic) Service Staff at Bates. Lauritz is a Middleton resident.

## NEWS FROM BATES RADIATION PROTECTION GROUP

The Radiation Protection Group has added Tom Matthews (U. of Lowell), Hamid Moazeni, (Northeastern), John Mumley (Hogan Hospital) and Olen Peterson (FAA/Logan).

Marcel Semo of the Radiation Protection Group has retired. Marcel will continue to work on a one-day-a-week schedule.

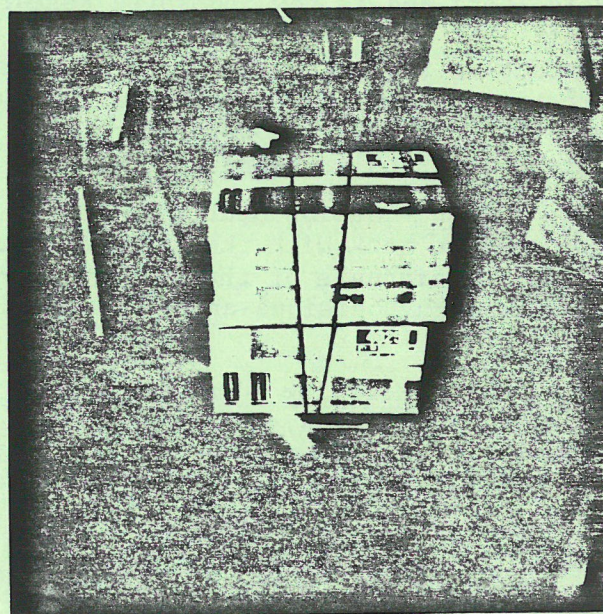
## RESEARCH NEWS

Bernard Wadsworth and Irwin Pless of the APC Group are now in Japan. They are at Tohoku University to discuss with their collaborators the tau neutrino experiment. Discussions and inspections of the construction of the Beam Dump chamber will also take place at Sendai and the IHI Company in Tokyo. After completion of their visit, they will return to the Institute of High Energy Physics in Beijing, People's Republic of China to solidify arrangements for the sending Chinese technicians, physicists, and engineers to Fermilab and M.I.T. to work on experiment E636. After leaving China, Bernie plans on traveling to Australia for a reunion with family and friends.

The Laboratory Headquarter's office put together six books of High Energy Review material. The 10 boxed booklets, pictured below, weighed in at 100 lbs. As soon as that was finished, there was another major effort, particularly for Dr. Eppling, for the five year plan for Dean Deutch.



Ten booklets as they looked before packing



Two boxes of the materials ready to be sent to DOE.



Early this year a committee was formed by the U.S. Department of Energy to review the three major laboratories of its support in the field of Intermediate Energy Nuclear Physics. The Laboratories in question: Berkeley, LAMPF, and the Bates Linear Accelerator facility, were to be examined by the Committee and assessed as to the Scientific merit of their programs in terms of the opportunities perceived for the field as a whole. The Committee, which was chaired by Prof. A.E. Vogt, Director of the TRIUMF Laboratory at the University of British Columbia, performed a detailed review, including a site visit of the Bates Laboratory, its program and its plans for future development. We have collected below a review of the Committee's report which we thought would be of interest to LNS Staff.

#### Excerpts from the Vogt Panel Report

The Bates facility grew out of the strong physics program at MIT. Bates has become a national facility for nuclear physics research using electromagnetic probes. The Bates physics program has been devoted to high resolution inelastic electron scattering studies, a field in which the lab is recognized as the international leader. The recent doubling of its energy to 700 MeV provides an important expansion of the research capabilities and strengthens the U.S. effort to study nuclear phenomena at short distances.

The morale of the staff is high and has resulted in a level of effective interaction and cooperation among the staff. Productivity is also high and there is an innovative attitude which permits progress to be made in spite of inadequate funding. One good example of this is the recirculator development. It is quite remarkable that this important project was completed within a shoestring budget of 1.8m, and only a few months behind the proposed schedule. Now that this recirculator and South Hall are coming into operation, adequate funding support for a broader program is crucial.

The immediate future of science with electromagnetic probes at Bates looks very bright, and the longer-term plans of the laboratory for a continuous wave beam capability offers very important prospects as Bates evolves towards a true national facility in the future.

We would like to give special thanks to Dr. Peter Demos for assisting us in compiling this information.

#### OF SPECIAL INTEREST

Many of you did not know or did not have the chance to contribute toward the special radio receiver for Henry Zufelt. With some contributions from people in the Lab, a group at Bates was able to buy a radio receiver for Henry. There are many other blind people who cannot afford to buy such receivers. Perhaps with the Holiday Season approaching, we could buy at least one receiver (\$80) for someone else in Henry's name. We will have a few bottles for depositing change, one in the Headquarters near the coffee, one at Bates, and one at Tech Square. Anyone interested in contributing should let us know, LNS Headquarters office on extension 3-2361.

Sam Tardivo and Shorty Vaudo, the LNS Property people, have moved to 26-544. Their extension is the same, 3-2385.

Anna Verhulst is available to help you with your word processing needs and to help members of the Laboratory learn the Mass 11 system. She is in rm. 26-537 and her telephone extension is 3-2388. Should you wish word processing for papers, etc., contact Jean Flanagan at 3-2361.

The High Energy Review originally scheduled for November 23rd and 24th, has been cancelled. We are trying for new dates. Dr. Wallermeyer is planning on attending the review when it is rescheduled.



## A REMINDER TO ALL MEMBERS OF RESEARCH GROUPS

We would like to remind you of the standard procedures regarding all of LNS Publications. Six copies of all papers, conferences and abstracts and 1 copy of all B.S. or Ph.D. theses are to be sent to Donna Henderson 26-505, at the same time they are submitted to the various journals. It is absolutely vital that we receive these copies so they can be processed through the proper channels and sent to DOE .

Please also note that all reprint order forms, which are usually sent to one of the authors, be left blank and sent to Donna for filling out. If more than the usual 100 are needed or they are to be with covers etc., please note this on a separate sheet of paper, it will be taken care of automatically.

## American Physical Society Tour

On October 16th approximately forty members of the Nuclear Division of the American Physical Society were led on a tour of the Bates facilities by Ingvar Blomqvist.

The semi-annual performance evaluation for support staff will begin Monday, November 1. The primary purpose of evaluations is to provide an opportunity for discussion between individual employees and their supervisors about the job and work relationship.

## CONGRATULATIONS

### Anniversary

Congratulations to Dan (Bates) and Dorothy Sedergran Baker, (LNS Purchasing Dept. 1952-57) on the occasion of their 25th Wedding Anniversary which will be October 26th.

### Births

--Mark Humphrey and his wife Nancy on the birth of their son Keith Aron born July 21st.

--John Prout and his wife Margaret for the birth of their daughter Rebecka, born July 18th.

--Steve Turley and his wife Deon for the birth of their daughter Carole on August 24th.

### Weddings

--Michal, daughter of Merle (Bates) and Brud Carter to Gregory Sands on September 25th.

--Charlene, daughter of Charles (Bates) and Margaret Russo to Mark Roch on August 7th.

### Engagements

Judith E. Gould (LNS Purchasing) to Thomas E. Sutter

Sheila A. Fossa (Bates) to George W. Dodson (also from Bates)



## NEW GRAD STUDENTS

| <u>Student</u>     | <u>Group</u> | <u>Undergrad Studies</u> |
|--------------------|--------------|--------------------------|
| Matthew Bayer      | Bates        | Brown University         |
| Timothy Bolton     | APC          | Stanford University      |
| He Sheng Chen      | EMI          | Peking University        |
| Karen Flodman      | Bates        | Mt. Holyoke College      |
| John Harton        | APC          | U. C. Davis              |
| Steiner Hoibraten  | Bates        | Norwegian Inst. of Tech. |
| Eric Kronenberg    | Bates        | Brown University         |
| Robert Lourie      | Bates        | M.I.T.                   |
| Eric Scheidker     | EMI          | University of Texas      |
| Lawrence Weinstein | Bates        | Yale                     |
| Laura Wiener       | EMI          | Reed College             |
| Yue-Ming Xiao      | Heavy Ion    | Fudan University         |



DO YOU REMEMBER THIS?

This is a cocktail party for Prof. S. C. Yang on the occasion of his Nobel Prize for the J Particle in 1976.



-Reminder to support staff personnel and their supervisors: The weekly time cards that you are submitting should be signed by your supervisor or designate. Many of the time cards have been submitted without signatures, and this is incorrect, the signature is essential.

### NEWSWORTHY NOTES

The Laboratory has purchased a Plasma Arch Burning Machine. The Plasmarc-120 is capable of quickly cutting stainless up to 1 1/4", copper and other metals, as well as burning disks and odd-shaped pieces.

This type of machine is a timesaving device, should you experiment require quick cutting, please contact Mario Aloisi, on extension 3-2392.

United Way Anna Verhulst is the Laboratory's representative for United Way. The Institute-wide goal is \$165,000. Last year the Laboratory participants gave \$642.00 and this represents only nine percent participation from the Laboratory, while the average Institute participation was twenty-two percent as you can see the Lab was considerably below the institute average. We are hoping the Lab will do better this year.

Bill Tanner (MIT Campus) has joined the Physical Plant Group as assistant to Mike Karaffa.

### WANTED: ONE BOWLER FOR TEAM V

ONE PERMANENT LEAGUE MEMBER SOUGHT FOR EXISTING TEAM, MUST BE AVAILABLE EVERY WEDNESDAY FROM 5:30 'TILL CLOSING, LOW AVERAGES ACCEPTED, SENSE OF HUMOR HELPFUL, NO PREVIOUS EXPERIENCE REQUIRED, PLEASE SEND RESUME AND/OR AVERAGE TO THE LNS BOWLING OFFICE, 26-519.

### SPORTS NEWS

#### Softball:

The LNS Quarks, in the Bucket A division of the Kentucky Fry League, came in 5th place out of 11 teams. They played 8 games and had 5 wins and 3 losses.

There were three new members this year, June Desmarais, Wayne Ryan and William Smith. The season ended with a cookout held August 20th after the season's last game.

#### Bowling:

by Judy Gould

The LNS Bowling League has just begun its third year of Good Clean Fun, and we're off to a rousing start. Already this season there have been 200 games by Tom DeChicco and Harvey Lander, and averages are on the upswing. Despite the weekly insults (take heed, Pat Pengeroth), good sportspersonship prevails as the competition gets fiercer.

Last week an impromptu trip to the Hilltop Steak House was undertaken by 18 ravenous bowlers who could not wait for the annual Spring Banquet. More diversions from weekly pizza are being plotted by the ever-vigilant Good Times Committee. Special Thanks are in order to Neal Dowling for all his accounting expertise at après-bowl!!!

### IN CLOSING

Thanks to M. Carter, R. Hulsizer, W. Lobar G. Nickerson, and M. Normile for sharing news with us.

Thanks to D. Henderson for her typing support.

If you have some news that you'd like to share with you co-workers, such as good news, interesting reserach, awards and or achievements, please send it along to Jean Flanagan, 26-505.

Happy Halloween to all.

Prepared by:  
Jean Flanagan  
26-505