# The American Physical Society

# Division of Electron and Atomic Physics

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TO MEMBERS OF THE DEAP from Tom Miller

#### REPORT OF THE NOMINATING COMMITTEE

The Nominating Committee, appointed by Eugene Rudd, consists of Steve Smith (chairperson), Norman Bardsley, Laird Schearer, and Ivan Sellin. The slate of candidates which they submitted is as follows:

Chairperson Bernd Crasemann (1 year)

Vice-Chairperson Alexander Dalgarno (1 year)

Secretary-Treasurer Patricia Dehmer (1 year)

Executive Committee Member Thomas Gallagher (one to be elected)

Robin Shakeshaft
Shek-Fu Wong

for a threeyear term)

Under the Bylaws additional nominations for any of the above offices by members of the DEAP will be recognized and included on the ballot if the nomination is supported in writing by five percent (83) of the members. Such nominations duly signed must reach me no later than September 19, 1979. In the absence of a contest for any given office the relevant nominee will be declared elected. Ballots for contested offices will be mailed in September.

The remainder of the Executive Committee is as follows: Eugene Rudd is currently Chairperson and will remain on the Committee for one more year as Most Recent Past Chairperson, replacing Eugen Merzbacher. Ivan Sellin will serve on the Committee as Division Councillor until 1/83. The elected Committee members are Daniel Kleppner (until 12/80), Hugh Kelly (until 12/81), and Win Smith (until 12/82). Serving one-year terms appointed by the Chairperson are Mitio Inokuti and Ronald Stebbings.

The DEAP Program Committee is chaired by Bernd Crasemann and is responsible for organizing symposia and related programs at DEAP and APS meetings.

The DEAP Fellowship Committee is chaired by Aaron Temkin and is responsible for making recommendations to the APS Council on elevations to fellowship for APS members whose experience is in atomic physics. Nominations supported by two members and accompanied by a vita for the nominee may be sent to Temkin at Code 680.1, NASA Goddard Space Flight Center, Greenbelt, MD 20771.

## DEAP MEETINGS CHANGED TO MAY, IN 1983

At its April meeting the Executive Committee voted to change the time-of-year of the DEAP annual meeting to May, beginning with the meeting hosted by JILA in Boulder in 1983. Specifically, the new rule requires "a three-day period in the week 20-26 May, or as close as possible to this week." There will be no meeting in 1982; that is, there will be a 17-month gap between the New York and Boulder meetings. This plan is dependent upon approval by the APS Council.

#### NRC-CAMS

The Dalgarno committee recommended that the activities envisioned by the DEAP for an "Atomic Sciences Advisory Committee" could best be carried out by the existing NRC Committee on Atomic and Molecular Science (CAMS). Ivan Sellin is the new chairman of CAMS and will be reporting on the work of CAMS at DEAP meetings henceforth. The DEAP will probably finance some of the efforts of CAMS. (The Executive Committe thanked Alex Dalgarno, Bob Madden, Earl McDaniel, and Ivan Sellin for their work during the past year on this matter.)

A subcommittee of CAMS, headed by Benjamin Bederson and Steve Smith, is currently carrying out a survey of activities and funding of atomic and molecular physics. Persons receiving this newsletter should have already received questionaires from Jean Gallagher, and may receive followup questionaires. The Executive Committee encourages DEAP members to respond to the questionaires. One result will be a directory of workers in this field. Another result will be hard data on our field which can be used in presentations to funding agencies or Congressional committees.

#### REFEREES

Pat Dehmer reported to the Executive Committee on a meeting of the APS Publications Committee, of which she is a member. She is now heading a subcommittee which will examine the refereeing of journal articles. Interested persons may write to her at Argonne National Laboratory, 203-C153, Argonne, IL 60439.

#### REPORT FROM THE DIVISION COUNCILLOR

Following the 27 April meeting of the APS Council, Ivan Sellin sent me a number of items of interest to DEAP members.

- 1. David Lazarus, a condensed matter physicist at the University of Illinois, announced his intention to accept appointment as Editor-in-Chief of the APS journals.
- 2. David Lide, Jr., of NBS, has been elected to serve a second consecutive term as Division Councillor for the Division of Chemical Physics, thereby assuring continued progress in our dialog with him concerning interactions between the DEAP and the DCP, and our joint welfare within the APS.
- 3. Although for previously announced reasons the traditional "Washington" meeting of the APS is moving to Baltimore in 1981, efforts are being made to ensure its return in 1982 and beyond, probably to the Shoreham-Americana Hotel. A likely consequence is a sharp reduction of our use of meeting rooms at the Shoreham-Americana, compensated by far heavier use of poster sessions than is presently the case.
- 4. After reviewing the issue of post-deadline paper acceptance, Council has voted to permit their continued presentation as poster papers only.
- 5. Please be reminded that our well-known colleague and former DEAP officer in several capacities, Ron Geballe, is presently Chairperson of the APS Nominating Committee. In the interest of bringing the DEAP closer to the mainstream of APS activities, you are urged to commend suitable nominees for the various committees and posts within APS-wide bodies to Ron's attention. His address is 201 Administration Building, Ag-10, Graduate School, University of Washington, Seattle, WA 98195.
- 6. The time-honored traditional means of dealing with knotty problems in this case Bob Adair's proposal for splitting up Physical Review Letters (See the editorial in the 31 December 1979 issue) as well as other pertinent policy questions concerning this journal has been followed. Stan Hanna, Division Councillor for the Division of Nuclear Physics, is to chair a panel on the future of Physical Review Letters. Our close colleague, former DEAP officer, and present Editor of Physical Review, Ben Bederson, is also a member of the panel. The DEAP opposes splitting Physical Review Letters. On the other hand, the

DEAP supports an informal proposal made by Bederson to include a Communications section in each issue of Physical Review A.

- 7. Ralph Alpher, of General Electric, who is also chairperson of the recently renamed Committee on Concerns in Physics (formerly the Committee on Opportunities in Physics), won election to the Executive Committee of the Council, replacing Lew Branscomb, who resigned because of new obligations as chairman of the National Science Board.
- 8. A number of proposed changes in the APS Constitution and Bylaws recommended by the Committee on the Constitution and Bylaws (on which the DEAP Councillor is a member) were approved by the Council. On the assumption that the remaining approval steps occur, they will take effect in January 1981. Their net evvect is to advance the schedule of the APS year so that the official year coincides with the calendar year (instead of beginning at the end of January) so that for example new officers will assume office January 1. The elections meeting of the Council is to henceforth coincide with the current November meeting thereof. This procedure will reduce delays and inefficiencies presently encountered following the January APS meeting.
- 9. Burton Muller (University of Wyoming) and Samuel Baldwin (University of Maryland) have been chosen to be APS Congressional Fellows. Council wishes to express the need for new candidate nominations.
- 10. Council approved a request from E. Amaldi, Insitiuto di Fisica "Guguelmo Marconi" in Rome, that APS extend formal approval for setting up a repository for the History of Quantum Physics at the Accademia Nazionale delle Scienze in Rome.
- 11. Council wishes to publicize the following resolution passed at the 27 April meeting.

"Being aware of the increasing importance of cross-disciplinary research the Council encourages the divisions and the Committee on Applications to support activities associated with such research within the Society. In addition to topical conferences, short courses, and symposia, the Council encourages the formation of topical subgroups within the divisions or the Committee on Applications and instructs the Society secretary to communicate its sentiment to the divisions and the Committee on Applications emphasizing the benefits of society sponsorship."

Ivan Sellin's address is ORNL, Building 5500 Room 131, PO Box X, Oak Ridge, TN 37830.

#### ATOMIC AND NUCLEAR DATA TABLES

The editorship of the journal Atomic Data and Nuclear Tables will be vacant, owing to the retirement of the founder of the journal, Katherine Way. Suggestions for a new editor will be welcome by the board of associate editors and the publishers (Academic Press).

### TWELFTH ANNUAL MEETING OF THE DEAP AT LOS ANGELES

In celebration of USC's 100th birthday:

The Twelfth Annual Meeting of the Division of Electron and Atomic Physics will be held in Los Angeles, California, on 1-3 December 1980. The scientific program will consist of contributed and invited papers and symposia. The Department of Physics of the University of Southern California will act as host, with the local arrangements committee consisting of Profs. Tu-nan Chang, William Cooke, Peter Lambropoulos, and Gerhard L. Weissler.

The scientific sessions will be held at the Davidson Conference Center on the campus of USC, corner of Figueroa Street and Jefferson Blvd., with free parking for conference attendees on the lot immediately west of the Conference Center. All DEAP members and their families who plan to attend should fill out the form attached and return it to G. L. Weissler, DEAP, Department of Physics, University of Southern California, Los Angeles, CA 90007. The local committee will attempt to register you in the hotel of your choice.

Please send no money for hotel accomodations.

We have the following blocks of rooms set aside for our DEAP meeting at four hotels:

150 rooms at the University Hilton across the street from the Davidson Conference Center;

50 rooms at the Los Angeles Hilton 30 blocks north of the Davidson Conference Center;

75 rooms at the Mayflower Hotel 3 blocks east of the Los Angeles Hilton; and

50 rooms at the Vagabond Motor Hotel 1/2 block north of the Davidson Conference Center.

The most probable prices are indicated on the attached form. While the local committee makes the reservations, the individual hotel will confirm them to the DEAP member directly. Those arriving at the Los Angeles International Airport should take the RTD Airport Express bus to the Los Angeles Hilton (approximately \$4.50 one way). A Hilton bus will provide transportation from the Los Angeles Hilton (downtown) to the University Hilton (about 4 miles south) every 30 minutes (no charge). Taxi services from the International Airport to downtown Los Angeles and USC will cost approximately \$20.00.

Registration will take place in the lobby of the Davidson Conference Center on the USC campus from 5 to 9 p.m. on Sunday, 30 November, and throughout the conference. On Sunday evening from 7-9 there will be an informal reception with wine and cheese at the Conference Center. On Tuesday afternoon, 2 December, there will be time available to visit various USC laboratories. In addition, V. McKoy at Caltech (tel. 213-795-6811, x2545), S. Trajmar at JPL (tel. 213-354-2145), and R. T. Poe at UC Riverside (tel. 714-787-5331) have agreed to make arrangement for DEAP members to visit their respective institutes. If the local USC committee is informed, we will make arrangements for DEAP members to visit other research laboratories at UCLA, Aerospace Corp., TRW, and Hughes Research Laboratories.

On Tuesday evening, 2 December, there will be a reception and cash bar at 6 p.m. preceding the traditional banquet, which will be held at USC's Town and Gown at 7 p.m. that evening.

Preregistration will greatly facilitate the planning and functioning of the meeting. The registration fee will be \$20 up to 15 November, and \$25 thereafter. The fee for unsupported students and unemployed members is \$3. Please use the preregistration form provided in this issue below, and indicate whether you will attend the banquet. In addition, please indicate your choice of the hotel on this form but send no hotel money. Checks for registration and the banquet should be made payable to "DEAP, Los Angeles."

Abstracts for contributed papers (one original and 2 duplicates) in <u>Bulletin</u> format should be sent to the Chairperson of the Program Committee, Bernd Crasemann, Department of Physics, University of Oregon, Eugene, Oregon 97403. These abstracts must be received by 19 September 1980. Overhead projectors will be provided as a matter of course, and 2" x 2" slide projectors should be avoided. However, if they are needed, this information should be attached to the abstracts at the time of submission. Authors are also requested to indicate on one corner of the abstract form whether they prefer a poster session, an oral presentation, or have no preference. Members are requested to summit only one abstract with the same <u>first author</u>, as we are unlikely to have space for supplementary sessions. It does not matter if several abstracts are submitted by the same person, provided that the first authors are different.

#### TOPICAL MEETING ON INFRARED LASERS

DEAP members should be alerted to a meeting on infrared lasers that will be held at USC the same week as the DEAP annual meeting (with Wednesday overlapping). The Optical Society of America's Topical Meeting on Infrared Lasers will be held at USC on 3-5

December 1980. The purpose of the meeting is to review and focus on the state-of-the-art of infrared lasers and to discuss lasers to be used for various applications. Authors are invited to submit original contributions in areas relevant to infrared laser research. Areas of interest include gas lasers, optically pumped lasers, tunable or high-power solid state lasers, Raman lasers, lasers involving non-linear processes in solids and gases, energy transfer processes and spectroscopy relevant to lasers, free electron lasers, tunable lasers, and innovative development of lasers for photochemistry, spectroscopy, isotope separation as well as high power applications. The deadline for the submission of contributions is 1 September 1980. Information regarding the meeting and contributions may be obtained from Martin A. Gundersen, Department of Electrical Engineering, Texas Tech University, Lubbock, TX 79409 (tel. 806-742-3501). After 1 September 1980, Gundersen's address will be: Department of Electrical Engineering, Seaver Service Center, University of Southern California, University Park, Los Angeles, CA 90007.

### FUTURE DEAP MEETINGS

Following our 1980 meeting at Los Angeles we have scheduled a meeting in New York City on Thursday through Saturday, 3-5 December 1981, hosted by New York University, and a meeting in Boulder, Colorado, on Monday through Wednesday, 23-25 May 1983 (pending APS approval as noted on page 1), hosted by JILA. There will be no meeting in 1982.

The Universities of Connecticut and Oregon have been selected for the 1984 and 1985 DEAP meetings, although the precise dates and order of the meeting sites has yet to be worked out. We are waiting to hear where the 1984 International Conference on Electronic and Atomic Collisions will be held in the US.

#### OTHER MEETINGS

- 1. 7th International Conference on Atomic Physics. The 7th ICAP will be held at the Massachusetts Institute of Technology on 4-8 August 1980. Participants will be housed in MIT dormitories and at nearby hotels. The deadline for contributed papers has passed. Interested persons may contact Daniel Kleppner (MIT) or F. M. Pipkin (Harvard). Kleppner's address is Room 26-235, MIT, Cambridge, MA 02139.
- 2. 33rd Gaseous Electronics Conference. The 1980 GEC will be held in Norman, OK, on 7-10 October 1980, with the University of Oklahoma acting as the host. Two workshops are planned. The first is being organized by David Spence, entitled "Electron Scattering by Atoms and Molecules with Emphasis on Laser Applications." The second is being organized by Howard Powell and is titled, "Kinetic Processes in Electronic Transition Lasers." The banquet speaker will be Duane Roller, who will talk on "Classical Classical-Physics." The local chairman for the meeting is R. M. St. John, Department of Physics and Astronomy, University of Oklahoma, Norman, OK 73019. The abstract deadline has passed.
- 3. 6th Conference on the Applications of Accelerators in Research and Industry. The 1980 meeting will be held in Denton, TX, at North Texas State University on 3-5 November 1980. The deadline for submission of abstracts has passed. Information on the meeting may be obtained from J. L. Duggan, Physics Department, North Texas State University, Denton, TX 76203.
- 4. Conference on Atomic Processes in High Temperature Plasmas. The next meeting in this series is being held at Louisiana State University in February 1981. The local chairman is R. J. W. Henry, Department of Physics, Louisiana State University, Baton Rouge, LA 70803.