

The American Physical Society

DIVISION OF ATOMIC, MOLECULAR, AND OPTICAL PHYSICS

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See reg. forms

October 30, 1989

Ms. Susan Foley
APS Liaison

American Institute of Physics
500 Sunnyside Blvd.
Woodbury, NY 11797

Dear Susan,

Enclosed is the 11-page November-December Newsletter to be sent to all members of the AMO Physics Division. I think this would work fine as a self-mailer if you print the sheets as 11 x 17. Please put Division of Atomic, Molecular and Optical Physics, American Physical Society, etc. as the return address. If you put the PRE-REGISTRATION form as the last page, the reverse side of that can be used for the Address and Return Address. Because of the need for lead time for the contributed papers, we should probably send this out FIRST CLASS MAIL.

Please give me a call to verify that you have received this. We'd appreciate it if you could monitor its progress, as usual, to avoid any problems.

Thanks again for your essential help!

Sincerely,



Winthrop Smith

Secretary-Treasurer

1989 III
Copy

The American Physical Society

DIVISION OF ATOMIC, MOLECULAR, AND OPTICAL PHYSICS

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November-December 1989

TO: Members of the Division of Atomic, Molecular, and Optical Physics
from Win Smith.

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I. 1990 Annual Meeting of the Division of Atomic, Molecular and Optical Physics: Monterey, California 21-23 May 1990

The 21st Annual Meeting of the Atomic, Molecular and Optical Physics Division (DAMOP) will be held in Monterey, California on May 21-23, 1990. The meeting will be hosted by the Physics Department of the Lawrence Livermore National Laboratory; Dr. Thomas N. Rescigno will chair the local committee. The meeting will be headquartered at the Doubletree Hotel, located on Fisherman's Wharf in Monterey. All scientific sessions and social functions will be held at the Doubletree and the adjoining Monterey Conference Center.

Instructions regarding submission of abstracts of contributed papers: The deadline for submission of abstracts of contributed papers for this meeting is February 5, 1990. This will allow adequate lead time for the printing of the abstracts in the APS Bulletin before the meeting date. This year I am requesting that the abstracts should be sent in standard APS Bulletin format to the Local Chairman of the meeting: Dr. Thomas N. Rescigno, 1990 DAMOP, Lawrence Livermore National Laboratory, P.O. Box 808, L-438, Livermore, CA 94550 by the above date. Please indicate on your

abstract whether you prefer a poster or a standard session for your paper. We cannot promise, but we will do our best to honor this preference to the extent it is practical. Properly received abstracts will be acknowledged by postcard after sorting into sessions. Please note the following:

- (1) For the standard APS Bulletin format for your abstract, see Bull. Am. Phys. Soc. 31, 1802 (1986) or a later edition of the Bulletin. Make sure your abstract is the correct SIZE and that it is ready for photocopying AS IS! If the font or format is too far from the norm, we will not accept the abstract.

- (2) Please include an appropriate PACS number on your abstract. These will be used as an aid in sorting into sessions. As an option, you may also indicate a session preference on the abstract page, based on the categories that were used in the 1989 Windsor DAMOP Meeting. Please note that instructions not on the abstract page itself (e.g. in a cover letter) have a higher probability of being ignored.

- (3) BE SURE TO SIGN YOUR ABSTRACT.

- (4) Submit the original (for forwarding to APS) and two extra copies of each abstract.
- (5) Mail your abstract early to be sure it arrives by the Feb. 5 deadline date.

- (6) Abstracts received after the deadline date will be included in the program of the meeting as long as space permits, at the discretion of the Local Chairman. Postdeadline abstracts will NOT be published in the APS Bulletin.

Location of Meeting: Preregistration

The Monterey Peninsula on the California central coast is an area of great natural beauty and also contains many historical points of interest. The 17-mile Drive, Point Lobos, Cannery Row and the Monterey Aquarium, Carmel and Pacific Grove feature among the local attractions of the area; to the south lies Big Sur. Monterey is also a good starting point for excursions north the the San Francisco Bay Area or east to California's National Parks. No formal companions' program is planned during the meeting, but information about the many sights of the Monterey area will be available.

Advanced registration is encouraged. Preregistration forms are

included in this Newsletter. The registration fee will be \$125 for APS members and \$70 for students if preregistration is received on or before April 1, 1990. Registration thereafter will be \$135 for members and \$80 for students. The registration fee for nonmembers is \$180. The registration fee covers the welcoming reception on Sunday evening, a luncheon on Monday, the conference banquet on Tuesday evening and refreshments during the meeting.

Travel & Lodging

Air --- Monterey is located approximately ninety miles south of San Francisco and is served by the Monterey airport. There are frequent connecting flights between Monterey and both San Francisco and San Jose International Airports. We have made arrangements with **United Airlines** for **SPECIAL DISCOUNT FARES** for this meeting. In addition to offering 40% off regular unrestricted coach fares, United will also discount their supersaver fares an additional 5%. To reserve these fares, call United at (800) 521-4041 and use the **Profile Number 436 AB** reserved for attendees of this meeting. You must use this Profile Number to procure these special discounts. If you book through a travel agency, be sure to give your agent the profile number.

Ground Transportation --- The Doubletree is only 5 to 10 minutes from the Monterey airport and taxi service is available. Rental cars are available at all airports. Special discount fares from Hertz are also available through United Airlines. Monterey is approximately 2 hours by car from San Francisco, 1 1/2 hours from San Jose.

Detach or copy form below for special student rates.

STUDENT LODGING SUBSIDY REQUEST
21st Annual Meeting of the American Physical Society
Division of Atomic, Molecular and Optical Physics
Meeting Dates May 21-23, 1990

Name _____
Affiliation _____
Address _____
City _____ State _____ Zip _____

Research Supervisor: _____
To cover lodging for three nights in a triple room, please mail this form, along with a check for \$75 payable to Regents, University of California, to:

Dr. T. N. Rescigno
1990 DAMOP
Lawrence Livermore National Laboratory
P. O. Box 808, L-438
Livermore, CA 94550
(415) 422-6210

Applications will be accepted on a space available basis and acknowledged by return mail. We will confirm hotel reservations at the Doubletree Hotel for all accepted applicants and return all other checks once the allotted number of rooms are filled.

Hotel Reservation Information — The Doubletree Hotel will be headquarters for the conference and all scientific sessions and social functions will be held there or in the adjoining Monterey Conference Center. Accordingly, a block of rooms has been reserved for the conference attendees and their guests at a special rate. Please use the Hotel Reservation Form to book your room no later than April 19, 1990. Late requests will be accommodated on a space available basis. Monterey is a popular tourist area, so we encourage you to make your reservations early.

Student/Postdoc Support

In addition to the reduced registration fee for students, limited funds are available for subsidizing lodging costs for graduate students and postdocs at the Doubletree Hotel. A number of triple rooms have been reserved for students, at a reduced fee of \$75 (i.e., \$25 per person per day). Application should be made early since the number of such rooms is limited. Students who wish such accommodations SHOULD NOT MAIL THE HOTEL RESERVATION FORM but should submit a student housing request along with their application to the local chairman. We will accept applications from students and postdocs for reduced hotel rates until the number of such rooms is filled. Thereafter, all checks for lodging will be returned. All student applications will be answered by return mail. Separate checks for registration (\$70) and lodging (\$75), made payable to the Regents of the University of California, should accompany the forms.

Reception & Registration

The registration desk will be open from 6:00 p.m. to 9:00 p.m. on Sunday evening and every day during the meeting. There will be a welcome reception at the Doubletree Hotel from 7:00 p.m. to 9:00 p.m. on Sunday evening; hors d'oeuvres, soft drinks and a selection of Livermore Valley wines will be served.

Conference Banquet & Luncheon — The conference banquet will be held on Tuesday evening, May 22nd in the DeAnza Ballroom of the Doubletree Hotel at 7:30 p.m. It will be preceded by a no-host cocktail party at 6:30 p.m. The banquet program will include the recognition of new Fellows. Following the banquet there will be a concert of chamber music featuring the Aurora Quartet, who will play music of Mozart and Brahms. Additional banquet tickets for accompanying guests can be purchased for \$40. There will be a luncheon in the DeAnza Ballroom following the morning session on Monday May 21st. Additional tickets for guests can be purchased for \$15.

II. SYMPOSIA OF INVITED TALKS FOR THE 1990 (21ST) ANNUAL MEETING OF THE DIVISION OF AMO PHYSICS, MONTEREY, CA, 21-23 MAY 1990

The following symposia of invited papers were recommended by the DAMOP Program Committee at its meeting at Windsor in May 1989 and are being organized by the Division members indicated in parentheses. The list of speakers is still incomplete and should be regarded as tentative.

1. Precision Tests of Fundamental Symmetries, co-sponsored by DAMOP and the Precision Measurements Topical Group of APS. (Larry Hunter, chair)
[titles of talks are unofficial and may change]

Eugene Commins, Berkeley, "Searches for atomic electric dipole moments"
Blayne Heckel, U. Washington, "Present limits on the neutron electric dipole moment"

Marie-Anne Bouchiat, Paris, "Measurements of atomic parity violation"
Walter Johnson, Notre Dame, "Theory of P and T violation in atoms"

2. Atoms and molecules at surfaces (Barry Dunning, chair)
R.J. Celotta, NIST Gaithersburg, "Tunneling microscopy of atoms on surfaces"
J.L. Erskine, Texas, Austin, "Use of inelastic electron scattering to probe atoms and molecules at surfaces"
J.C. Tully, AT&T Bell, Murray Hill, "Excited and charged states of atoms and molecules at surfaces"
J.T. Yates, Pittsburgh, "Imaging chemical bond directions at surfaces - the study of structure and vibrational dynamics of adsorbed species"

3. Antimatter interactions with matter (Ivan Sellin, chair)
Gerald Gabrielse, Harvard, "Cooling antiprotons with cold electrons"
James Cohen, Los Alamos, "Exotic atoms and molecules in fusion catalysis"
Michael Charlton, London, "Collisions of low- and intermediate energy antiparticles"
Joachim Burgdoerfer, Tennessee, "Fast antiproton interactions in condensed matter"

4. Atoms in Intense Radiation Fields (Howard Bryant, chair)
M.D. Perry, Lawrence Livermore, "The role of resonances in strong field multiphoton processes"
Wilhelm Becker, New Mexico, "Simple models for above-threshold ionization and

higher harmonic production in rare gases"
C.R. Quick, Jr., Los Alamos, "Experimental studies of multiphoton detachment of the H-ion"
W.G. Greenwood, Pacific Lutheran, "Numerical simulation of multiphoton detachment of H-"

5. Short Wavelength Radiation, being organized by Andy Hazi.

6. New Facilities and Techniques, being organized by Dana Anderson.

7. Hot Topics, being organized as late as possible by Gordon Dunn. Please send any suggestions to him soon.
In addition to these symposia, there will be a review talk on the Atomic Physics of Fusion and other single invited talks to be announced.

III. SYMPOSIA SPONSORED BY THE DIVISION AT THE WASHINGTON APS MEETING, APRIL 16-19, 1990

NOTE that the abstract deadline for contributed papers for this meeting is 12 January 1990. Contributed paper abstracts for the Washington Meeting should be sent, as usual, directly to APS.

1. Joint DAMOP-Division of Astrophysics Symposium, Atomic and Molecular Physics in Laboratory and Astrophysical Plasmas
Alice Harding, NASA Goddard, "Radiative transfer in strong magnetic fields near neutron stars"

Adair Lane, Boston University, "Molecular astrophysics of interstellar clouds"
John Seely, NRL Washington, "Atomic physics of highly charged ions in laboratory plasmas"
Russel Hulise, Princeton PPL, "Atomic processes in magnetically-confined fusion plasmas"

2. Few Electron Effects *W. Few Body ? Chen ?*
C.D. Lin, Kansas State, "Coulombic three-body problem of arbitrary masses"
J.H. Macek, Tennessee, "Correlation in intermediate states in ion-atom collisions"
W.E. Meyerhof, Stanford, "Two-center few-body effects"
A. Chetoui, Institut P. et M. Curie, "Observations of few electron transitions"

3. In addition, two more Joint Symposia are being organized with the Division of Particle Beams and with the Few Body Topical Group, respectively. Speakers will be announced.

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IV. ELECTION OF NEW DIVISIONAL OFFICERS IN 1990

For your information, the slate of candidates just received from the DAMOP Nominating Committee (Daniel Kleppner, chair with members: A. Dalgarno, W. Kaupilla, S. Leone, and W. W. Smith) is given below. All candidates have agreed to run in the election to be conducted by mail ballot early in 1990. Ballots and biographies will be enclosed with the next Newsletter. There is ONE VACANCY for each office.

For Vice-Chair:

Patricia M. Dehmer, Argonne National Laboratory
Patrick Richard, Kansas State University

For Executive Committee

F. Barry Dunning, Rice University
Peter A. Koch, SUNY Stony Brook
Carl Wieman, JILA

For Secretary-Treasurer

Mark D. Havey, Old Dominion University
James McGuire, Kansas State University
John A. Tanis, Western Michigan University

V. ANNOUNCEMENTS

1. APS AND DOE LONG RANGE PLANNING EXERCISES

Both the APS (across all fields) and the Atomic Physics Program under J. V. Martinez in the Division of Chemical Sciences of DOE are making serious efforts to conduct long-range planning exercises on the needs of AMO physics research over the next few years. This kind of planning is likely to have an impact on future funding patterns in our field. Eugen Merzbacher is our representative to the Physics Planning Committee PPC of the APS, which is seeking to update the recommendations of the 1986 Brinkman Report with regard to financial support needs. In addition, all members of the Division should have received a letter from Joe Martinez concerning a DOE-sponsored workshop on Future Opportunities in Atomic, Molecular and Optical Sciences just held in November at

Lawrence Berkeley Laboratory and another to be held in March of 1990. Division members will have an opportunity to make further input to these planning activities at an evening discussion session to be held at the Monterey meeting in May. Please plan to attend this session in addition to contacting Merzbacher (Univ. of North Carolina) or Martinez (Atomic Physics Program Mgr., Div. of Chemical Sciences; ER-14, GTN; Washington, DC 20545) if you have specific comments about opportunities and needs in this field.

2. SOME FUTURE MEETINGS OF INTEREST TO DAMOP MEMBERS (a

partial list):

Workshop on H-Spectroscopy -- this informal workshop will be held at the University of New Mexico, Albuquerque, NM from January 9-11, 1990. The organizing committee includes Howard Bryant, J. Donahue, C.H. Greene, P.G. Harris, A. L. Merts, C.R. Quick, Jr., A.R.P. Rao and W.W. Smith. Those interested in attending who have not yet registered should contact H.C. Bryant (505) 277-3044 or P.G. Harris (505) 667-6209.

50th Annual Physical Electronics Conference, NIST,

Gaithersburg MD, June 11-13, 1990. This conference is sponsored by the APS Divisions of Condensed Matter Physics and AMO Physics and this year is being jointly hosted by the University of Maryland and the National Institute of Standards and Technology. The organizing committee consists of: D.R. Hamann (AT&T Bell Labs), General Chairman; R.L. Stockbauer, Treasurer; R.R. Cavanagh and E.D. Williams, Local Co-Chairpersons; P.H. Citrin, P.J. Estrup, S.C. Fain, Jr., P.J. Feibelman, R. Gomer and E.W. Plummer. The conference is concerned with the fundamental physics and chemistry of solid surfaces and interfaces, emphasizing the description of surface and interface properties at a fundamental atomic and molecular level. Those wishing to receive the Conference Brochure may contact: Linda Johnson, Conference Registrar, B248 Chemistry, NIST, Gaithersburg, ND 20899, (301) 975-2533, FAX 301-975-3038. For other conference information, please contact: R.R. Cavanagh, B248 Chemistry, NIST, Gaithersburg, MD 20899, (301) 975-2368, FAX 301-975-3038, electronic mail CAVANAGH@NBSENH. E.D. Williams, Dept. of Physics and Astronomy, University of MD, College Park, MD 20742-4111, (301) 454-7204, FAX 301-454-0382.

12th International Conference on Atomic Physics, Univ. of

Michigan, Ann Arbor, 29 July - 3 August 1990. Conference Chair is A. Rich (Michigan) and Co-Chair is R.R. Lewis (Michigan). This conference on fundamental problems in

atomic physics is by invitation only. If you are interested in more information about this conference, contact Ms. Larisa Zlatić, ICAAP-12 Secretary, Dept. of Physics, Univ. of Michigan, Ann Arbor, MI 48109-1120, (313) 764-8459, FAX (313) 763-9694.

Gordon Conference on the Dynamics of Simple (Few Body) Systems in Chemistry and Physics, Proctor Academy, NH, August 12-17, 1990. This multidisciplinary conference brings together scientists interested in scattering and bound states involving electrons, atoms, molecules, clusters, nuclei, and/or nucleons. Organizers: W.P. Reinhardt (U. Pennsylvania) and J. Friar (LANL). For information contact Reinhardt at Dept. of Chemistry, U. of Penna., Phila., PA 19104-6323.

The Sixth Interdisciplinary Laser Science Conference (ILS-VI) is scheduled to be held in Minneapolis, MN on September 18-22, 1990, at the Minneapolis Marriott. The deadline date for submission of abstracts is 11 May 1990. Further information will appear in the next Newsletter and in the APS Bulletin.

The 1990 Annual Meeting of the Optical Society of America will be held in Boston on November 4-9, 1990 as a component of OPTCON'90.

3. NIST PRECISION MEASUREMENT GRANTS

Applications are being solicited for two new Precision Measurement Grants, sponsored by the National Institute of Standards and Technology, to be awarded beginning 1 October 1990 (Fiscal Year 1991). Each grant is in the amount of \$30,000 per year, renewable for up to two additional years, for a total of \$90,000. These grants encourage research in U.S. colleges and universities in the field of precision measurement and fundamental constants and foster contacts between NIST scientists and U.S. researchers actively engaged in such work. Candidates' pre-proposal summaries and biographical information must reach NIST by 1 February 1990 to be considered for the FY '91 awards. For more information, contact Barry N. Taylor, Chairman, NIST Precision Measurement Grants Committee, National Institute of Standards and Technology, Building 221, Room B160, Gaithersburg, MD 20899, (301) 975-4220.

4. PRIZES OF INTEREST TO DAMOP MEMBERS

The W.P. Allis Prize is for research in microscopic or macroscopic gaseous electronics. Nominations should be sent as soon as possible to Fred Biondi (University of Pittsburgh, who chairs the selection committee).

The I.L. Rabi Prize for outstanding research in AMO physics accomplished within 10 years of the Ph.D. will be awarded in odd years starting in 1991. Nominations should be sent to Prof. Norman Ramsey (Harvard University). The APS Daviss-Gerner Prize will be awarded for atomic physics in 1990 and in even years, alternating with the Rabi Prize. The selection committee is chaired by Lloyd Armstrong and should be sent to him at Office of the Dean of Arts and Sciences, Johns Hopkins University, Baltimore, MD. The Herbert Broida Prize in atomic, molecular and chemical physics has been extended for another five years by the APS Council and is to be awarded in 1990. Consult one of the Division officers for further information.

5. The 1991 Annual Meeting of DAMOP will again be a part of the American Physical Society Spring Meeting in April in Washington, DC. Suggestions for speakers and/or symposia should be sent to the new Program Committee chair, Tony Starace (at the University of Nebraska, Dept. of Physics and Astronomy).

6. DAMOP FELLOWSHIP AND PUBLICATIONS COMMITTEES

The members of the Fellowship Committee for 1989-90 are Thomas F. Gallagher, chair (Department of Physics, University of Virginia, Charlottesville, VA 22901), A. Dalgarno, Vincent McKoy, Arthur V. Phelps and Lewis C. Cocke. The Publications Committee for 1989-90 consists of Sheldon Datz, chair (Physics Division, P.O. Box X, Oak Ridge National Lab, Oak Ridge, TN 37830), William H. Parkinson, Richard A. Gottscho, Joseph L. Dehmer and Stephen R. Lundeen. If you have nominees for APS Fellow or matters to bring before either committee, please contact the chair or a member of the appropriate committee.

BEST WISHES for a HAPPY HOLIDAY SEASON from the DIVISION!

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DIVISION OF ATOMIC, MOLECULAR, AND OPTICAL PHYSICS

The American Physical Society

July 24, 1989

Ms. Susan Foley
American Institute of Physics
500 Sunnyside Boulevard
Woodbury, NY 11797
Dear Susan,

Enclosed is the 6-page August Newsletter for the AMO Physics Division. If possible, I'd like this to be sent out in the form of a self-mailer, with Division of Atomic, Molecular and Optical Physics, APS, as the return address, to all Division members. I think we might as well save some money by sending this out bulk mail as we discussed today by phone, assuming that it is mailed by around mid-August.

Please give me a call to verify that you have received this. Also, we'd appreciate it if you could monitor its progress, as usual, to avoid any problems.

Thanks for your essential help!

Sincerely,

Win

Winthrop Smith
Secretary-Treasurer

P.S. As we discussed, it would be good if you could strip off the old Letterhead from Page 1 of the Newsletter and add the new one that you have just printed on the new stationery. Thanks!

The American Physical Society

DIVISION OF ATOMIC, MOLECULAR, AND OPTICAL PHYSICS

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August 1989

TO: Members of the Division of Atomic, Molecular, and Optical Physics
from Win Smith.

I. 1989 ELECTION RESULTS

Congratulations are in order for the winners of the Spring 1989 election of a new Divisional Vice-Chairperson and Executive Committee Member. Anthony F. Starace of the University of Nebraska Lincoln will be the new Divisional Vice-Chair for the next year, automatically becoming Chairperson at the end of May 1990. Gordon Drake of the University of Windsor (Ontario) was elected to a three-year term on the Executive Committee of the Division. Gordon Dunn, last year's Vice-Chairperson, succeeds to Chairperson for the coming year. This was the closest election in some years, continuing a tradition of tightly-contested elections. Thanks go to all five people who were willing to stand for election and take responsibility on behalf of DAMOP's future. We look forward to a good year!

II. REPORT ON THE 1989 AMO PHYSICS DIVISION ANNUAL MEETING IN WINDSOR, ONTARIO

The Twentieth Annual Meeting of the Division was held on the campus of the University of Windsor in Canada, as a joint meeting with the Division of Atomic and Molecular Physics of the Canadian Association of Physicists (CAP). Members of CAP with whom I spoke were pleased at the large scale of the joint meeting. Registered attendance was 446 including students. There were 28 invited papers and approximately 345 contributed papers (of which 217 were scheduled in the three poster sessions). The complete program for the meeting was published in the May 1989 issue of the Bulletin of the APS.

1989 IV

Fellowship certificates were presented by DAMOP Chairperson Walter Johnson at the banquet in Windsor to several members of the Division elected APS Fellows during the past year.

Division Chair Walter Johnson presided at the Business Meeting of the Division, beginning by introducing the newly elected officers. W. Smith presented the Secretary-Treasurer's report in which he indicated that Division membership is continuing to increase at a healthy growth rate of several percent (~8%) each year over the last few years. As of December 1988, membership stands at 3809. Income for the period 4/1/88 to 4/1/89 as a return from APS dues plus registration credit at the 1988 Baltimore APS/DAMOP meeting was \$11,151, plus an additional \$2,897 in interest (~8% annual rate), for a total of 14,048, while disbursements over the same period plus services (mostly mailing and printing) totaled \$16,247. An adjustment from APS for charges to DAMOP for last year's Baltimore meeting will, however, bring the cash flow for the year into near balance. Estimated balance as of 6/30/89, before a final accounting for the Windsor meeting is included, is approximately \$28,000 or roughly \$7.25 per member, accumulated over a number of years. There were suggestions from the floor as to various ways to use this "surplus", such as a prize for the best new Ph.D. thesis in AMO physics or a fund to subsidize student attendance at DAMOP meetings. In view of the recent changes in the APS method of financing the Divisions, the fact that annual costs for this newsletter approach \$6.00 per member (and rising), as well as the need for a fund to finance future meetings, your Secretary-Treasurer recommended caution for the short term.

Several other items were discussed at the Division's Business Meeting, as follows. Norman Bardsley reported on two new DAMOP-supported APS prizes, the Allis Prize and the I.L. Rabi prize, both discussed in more detail below. Alex Dalgarno reported on the new Institute for Theoretical Atomic and Molecular Physics, funded by NSF at the Harvard-Smithsonian Center for Astrophysics. One of the main purposes of the Institute is the encouragement of good graduate students to go into this field. There will be an active visitors' program providing some travel and subsistence for both short and long-term visits. George Victor is in charge of this program. There were reports by Tom Resigno on next year's DAMOP meeting (see below) and by Ben Bederson on the restructuring of Physical Review. As of January 1, 1990, there will be two sections each month: A1 dealing with AMO physics and A15 dealing with general and plasma physics, non-condensed matter classical topics and biological physics. Dick Pratt gave the NSF rotator's report on behalf of himself and Ivan Sellin, both returning in the fall to their academic posts (see News from NSF below). Finally, Ed Pollack reported on the New York ICPAC meeting (July-August 1989), which will move to Brisbane in '91 and Aarhus in '93, and Brian Mitchell of the University of Western Ontario announced an invitation to hold the 1995 ICPAC collisions conference at a new conference center in

Whistler, B.C., near Vancouver, where one can ski in the summer!

The Local Committee for the Windsor meeting, chaired by Gordon Drake of the University of Windsor Physics Department, worked hard to make the meeting go very smoothly and provided an enjoyable atmosphere and ambience in support of the scientific sessions. Other members of the Local Committee were: J.B. Atkinson, W.E. Baylis, M. Czajkowski, N.E. Hedgcock, R. Helbing, R. Krause, J.W. McConkey, M. Schlesinger, A. van Wijngaarden, and J. Franklin, the conference secretary. Warm thanks go to all of our hosts and participants from both the APS and the Canadian Association of Physicists for the success of this meeting.

III. AMO PHYSICS DIVISION COMMITTEES FOR 1989/90

The membership of the various divisional committees for the coming year is given below, so far as they were known when this newsletter went to press. Additions will be reported in the next newsletter. In each case, the name of the chair is underlined and his/her address is given in parenthesis. This is to remind you that you are welcome and strongly encouraged to communicate your needs and suggestions to these committees. We need the help of all who are willing and able to assist the division in the many activities represented by these committees. In particular, suggestions for future programs of invited speakers or symposia, and nominations for future officers and new APS Fellows should be addressed to the chairs or members of the appropriate committees in a timely fashion. The time to do this for the coming year is late summer and early fall.

Executive Committee: Gordon Dunn (JILA, Univ. of Colorado-NIST), Anthony Starace, Winthrop Smith, Walter Johnson, Alex Dalgarno, David Pritchard, Robert Freund, and two new members to be appointed by the chair.

Program Committee: Anthony F. Starace (Dept. of Physics and Astronomy, The University of Nebraska Lincoln, NE 68588-0111), Jim Bayfield, Howard Bryant, John Delos, Gordon Dunn (ex-officio), Barry Dunning, Andy Hazi, Larry Hunter, Jim McGuire, Ron Phaneuf, Ivan Sellin, Win Smith (ex-officio) and Linda Young. Newly appointed members are: Tom Gallagher, Kate Kirby, Steve Leone, Steve Lundeen, William Stwalley.

Nominating Committee: Daniel Kleppner (Room 26-231, Dept. of Physics, M.I.T., Cambridge, MA 02139), Alex Dalgarno (Divisional Councilor), Win Smith (ex-officio). Other members to be announced.

Fellowship Committee: Thomas F. Gallagher (Dept. of Physics, Univ. of Virginia, Charlottesville, VA 22901), and others to be announced.

The Committee on Atomic, Molecular and Optical Science operates under the auspices of the National Academy of Sciences/National Research Council. Mike Lubell has succeeded past chair Lloyd Armstrong as the current chair of this advisory committee. The Committee met most recently in October 1988 and April 1989. There are three new members: Gordon Dunn, David Pritchard and Roberta Saxon. This group monitors science policy and funding issues in AMO physics. It responds to requests for advice from various government agencies. Recently CAMOS organized a workshop to be held in November on muon-catalyzed fusion, broadening it to include exotic atoms. The Directory of AMO Scientists is being updated to include more people from the optics/laser research area, using APS, OSA and IEEE databases. Rolf Sinclair (NSF) has asked CAMOS to conduct a new survey of funding of AMO science throughout the government, to the extent

V. SUMMARY OF CAMOS ACTIVITIES

In 1991, our annual meeting will again be a part of the American Physical Society Spring Meeting in Washington, DC, in April. Suggestions for speakers and/or symposia should be sent to the new Program Committee chair, Tony Starace (at the University of Nebraska). In 1992, it is expected that our annual meeting will be held in the Chicago area, with the AMO physicists at Argonne National Laboratory serving as hosts.

Next year's annual meeting of the Division will be held May 21-23, 1990 at the Doubletree Inn and Conference Center near Fisherman's Wharf in Monterey, California, with the Physics Department of Lawrence Livermore National Laboratory as local host. The local chairperson is Tom Rescigno. Other members of the local committee include: R. Bauer, M. Chen, D. Dietrich, A. Hazi, K. Kulander, R. Marrs, T. Rescigno, D. Schneider and N. Willard. Easy commercial air access is available to Monterey. The basic outlines of the symposia for the 1990 meeting were set at the 1989 Program Committee meeting. Additional suggestions for particular speakers or hot topics should be sent to Gordon Dunn, ASAP.

IV. NEXT AND FUTURE ANNUAL MEETINGS

Thanks for their efforts and dedication are due to all who served the Division on the various committees during the past year. In particular, the members of last year's Publications Committee deserve special recognition as they were not announced in previous newsletters. Gordon Drake served as chair of that committee and the other members were Gordon Berry, Larry Curtis, Harvey Gould and Robin Shakeshaft.

Publications Committee: Sheldon Datz (P.O. Box X, Oak Ridge National Laboratory, Oak Ridge, TN 37830). Other members to be announced.
Public Education Committee: to be announced.

Handwritten notes:
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this is practical. CAMOS plans a survey the level of effort in experimental AMO physics, particularly at major universities, along with a parallel study to see whether the needs of industrial laboratories for scientists in this area are being met by current Ph.D. production.

VI. NEWS FROM NSF

In his report at the DAMOP Business Meeting, Richard Pratt reported on the Atomic, Molecular and Plasma Physics program at NSF and on the Atomic and Molecular Theory program. He indicated that while funding in the experimental AMO physics program was expected to increase by only about 4%, the Physics Division Theoretical Physics program in all fields had increased this year by 9% and even more than this for AMO theory, with the initial funding of the new Harvard-Smithsonian theory institute. Proposals for new Science and Technology Centers are due at NSF in August, 1989. There was one new Presidential Young Investigator award in AMO Physics this fiscal year, to Randy Hulet of Rice University. The NSF Physics Advisory Committee recently concluded that theoretical physics was underfunded, particularly atomic and nuclear theory. They also indicated that a boost for experimental AMO physics may be needed now. Large construction projects in other areas of physics usually come with operating funds that contribute to research support; these have been lacking in our field, they said. A subcommittee was formed to study the funding situation for experimental AMO physics. Some personnel changes at NSF starting this fall were announced: Steve Smith will take over the administration of the experimental atomic, molecular and plasma physics program in the Fall. A search was still on for a theory rotator but rumor has it that one has now been found. Rolf Sinclair will coordinate several interdisciplinary responsibilities within the NSF Physics Division (for example, the Presidential Young Investigator's, Research in Undergraduate Institutions and Minority Research Initiation Programs) after this year's "sabbatical" at Los Alamos. Rolf received warm thanks and sustained applause from the audience for his able and dedicated service to our field for more than twenty years.

VII. SOME OTHER FORTHCOMING MEETINGS OF INTEREST

- * ILS-V: the 5th Interdisciplinary Laser Science Conference will take place on the campus of Stanford University, Sunday, August 27-Thursday, August 31, 1989. This conference is sponsored by the Laser Science Topical Group of APS and serves as its annual meeting. There are joint sessions sponsored by DAMOP and three other divisions of APS. Registration forms may be found in any recent Bulletin of the APS. Inquiries may be made to the APS Meetings Department (212)682-7341, or to Lynn Borders, ILS-V Administrative Assistant, Univ. of Iowa, (319)335-1299. Abstract deadline was May 12, 1989.
- * The 7th Topical Conference on Atomic Processes in Plasmas will be

* An informal workshop on H-Spectroscopy is being planned at the University of New Mexico in Albuquerque, from January 9-11, 1990. The organizing committee presently includes Howard Bryant, J. Donahue, Chris. H. Greene, P.G. Harris, A.L. Merts, C.R. Quick, Jr., A.R.P. Rao, and W.W. Smith. Those interested particularly in attending should contact H.C. Bryant (505) 277-3044 or P.G. Harris (505) 667-6209.

VIII. APS PRIZES OF INTEREST TO DAMOP MEMBERS

The W.P. Allis Prize for research in microscopic or macroscopic gaseous electronics has been approved and funded by five \$10,000 contributions each from GE, GTE, AT&T Bell Labs, Xerox and IBM. The selection committee chair, selected by our Division, is Fred Biondi (University of Pittsburgh); nominations are now being solicited and should be sent this Fall to him.

The I.I. Rabi Prize for outstanding research in AMO physics accomplished within 10 years of his/her Ph.D. has now been endowed to the extent of more than \$53,000 and will be awarded in odd years starting in 1991. Norman Ramsey of Harvard University was selected by DAMOP as chairman of the first I.I. Rabi prize selection committee: nominations should be sent to him. The APS Davissson-Germier Prize will be awarded for atomic physics in 1990 and in even years, alternating with the Rabi Prize. The selection committee for the Davissson-Germier Prize is chaired by Lloyd Armstrong (Dean of Arts and Sciences, Johns Hopkins University).

The Herbert Broida Prize in atomic, molecular and chemical physics has been broadened and extended for another five years by the APS Council. It is to be awarded again next year for a piece of work done within the past 5 years.