

mailed to APS 9/12/84
Rec'd copy 9/25/84
1984 IV

The American Physical Society
DIVISION OF ELECTRON AND ATOMIC PHYSICS

HUGH P. KELLY, Chairperson
UNIVERSITY OF VIRGINIA
DEPARTMENT OF PHYSICS
CHARLOTTESVILLE, VIRGINIA 22901
(804) 924-6587

RONALD F. STEBBINGS, Vice-Chairperson
RICE UNIVERSITY
DEPARTMENT OF SPACE PHYSICS & ASTRONOMY
HOUSTON, TEXAS 77005
(713) 527-8101, EXT. 3531

KATE P. KIRBY, Secy.-Treas.
CENTER FOR ASTROPHYSICS
60 GARDEN STREET
CAMBRIDGE, MASSACHUSETTS 02138
(617) 495-7237

September 1984

To Members of the DEAP from Kate Kirby

FIRST ANNOUNCEMENT OF THE
SIXTEENTH ANNUAL MEETING OF THE
DIVISION OF ELECTRON AND ATOMIC PHYSICS
UNIVERSITY OF OKLAHOMA, NORMAN, OKLAHOMA
29 - 31 MAY 1985

SUBMISSION OF ABSTRACTS

Abstracts for contributed papers (one original and two
duplicates) in standard Bulletin format should be sent to
the Secretary-Treasurer, Kate P. Kirby, Center for Astro-
physics, 60 Garden St., Cambridge, MA 02138. The deadline
for receiving abstracts is February 1, 1985.

Please note on one corner of the abstract whether you prefer
an oral session or a poster session. Please sign your
abstract! In addition, please include an appropriate PACS
number on your abstract. The PACS numbers will be used to
aid in sorting the abstracts into sessions, and, therefore,
they should be as specific as possible and should indicate
the type of audience you wish to address.

Both overhead and 35 mm slide projectors will be available
in the oral sessions. The poster boards are 8 feet tall by
4 feet long (the top 2 feet are too high to be usable except
possibly for a title) and will be available all during the
meeting. For the convenience of all attendees, it is urged
that you put up your poster the first morning.

I. SIXTEENTH ANNUAL MEETING OF THE DIVISION OF ELECTRON AND ATOMIC PHYSICS, Norman, Oklahoma May 29-31, 1985

The Sixteenth Annual Meeting of the Division of Electron and Atomic Physics will be hosted by the University of Oklahoma, with the local organizing committee headed by David E. Golden and Thomas M. Miller. The scientific sessions will be held on campus at the Oklahoma Center for Continuing Education. The program will consist of contributed papers, invited papers, and symposia.

Norman, Oklahoma is a half-hour drive from the Will Rogers Airport in Oklahoma City and is therefore easily reached by air. Participants with their own planes may land at the University's Max Westheimer Field! Oklahoma is bordered by Arkansas, Missouri, Kansas, Colorado, New Mexico, and, last-but-not-least, Texas. Families might want to make Norman the starting point for a vacation tour of the southwest.

The Oklahoma Center for Continuing Education (OCCE) is located 1.9 miles east of Interstate Highway 35 (Lindsey St. exit) and 0.4 miles south of Lindsey St. between Elm St. and Asp St. near Timberdell St. The OCCE will provide primary housing for conferees and families at the conference site. Several choices are available. All are air-conditioned and include maid service and free parking.

- (a) The Sooner House has 72 twin-bedded hotel rooms with private bathrooms and color TV.
- (b) The Hall of Advanced Studies has 8 suites each of which consist of a living room with TV, a large bathroom, and four separate single-occupancy bedrooms.
- (c) Walker Tower dorm rooms have a bathroom shared by two adjoining twin-bedded rooms. No TV.

Check-in service for most campus housing is at the Sooner House. Those in the dorm should check in at Walker Tower. Check-out time is 2 p.m. You may be able to stay until Saturday if no other meeting is scheduled to begin on the Saturday following our meeting. Please check with the OCCE about extra days. The attached housing reservation form lists prices and the address of the OCCE. Meals can be taken in the OCCE Commons cafeteria adjacent to the conference center and housing area, or in restaurants in the University area.

REGISTRATION FORM
1985 ANNUAL MEETING
APS DIVISION OF ELECTRON AND ATOMIC PHYSICS
NORMAN, OKLAHOMA, 29-31 MAY 1985

Please print or type your name and affiliation as you want it to appear on your name badge:

Name _____

Affiliation _____

Business Address _____

City _____

State _____

Zip _____

Telephone _____

Social Security No. _____

Registration fee, received on or before 28 April 1985 @ \$45	\$ _____
Registration fee, received after 28 April 1985 @ \$50	\$ _____
Registration fee, student @ \$10	\$ _____
Banquet (number _____) @ \$14	\$ _____
Total	\$ _____

☐ I expect to require transportation, and will arrive at Will Rogers World Airport in Oklahoma City on May ____, at approximately ____ (am/pm). Number of accompanying family members: _____.

Make checks payable to the University of Oklahoma and mail to:

Central Registration Services
OCCE
1700 Asp Avenue
Norman, OK 73037

You may enclose the Housing Form with the Registration form.

If you wish to stay in a motel, you must make your own reservations. Major nearby motels in the Norman area are:

Holiday Inn
I-35 at W. Main St.
Norman, OK 73069
(405) 329-1624
(3.3 miles away)

Ramada Inn
I-35 at W. Lindsey St.
Norman, OK 73069
(405) 321-0110
(2.3 miles away)

Sheraton Inn
1000 N. Interstate Dr.
I-35 at Robinson St. Exit
Norman, OK 73069
(405) 364-2882
(4.3 miles away)

Howard Johnson's
I-35 at W. Main St.
Norman, OK 73069
(405) 329-8000
(3.3 miles away)

Dorchester Inn
609 Interstate Dr.
I-35 at Main St.
Norman, OK 73069
(405) 360-4380
(3.4 miles away)

Participants arriving at Will Rogers World Airport in Oklahoma City should go to the limousine service desk in the baggage claim area for transportation to the Sooner House at the University. The cost for a limousine is \$22.50 for 1 person, \$12 each for 2, \$8.75 each for 3, \$7.75 each for 4, or \$6.50 each for 5. We will arrange for 11-person mini-buses to make trips at times most people indicate as their arrival time, at \$6.00 each. To arrange return trips, call 681-3311. The one-way trip is about 25 miles.

Registration is possible Tuesday evening at the OCCE Forum Building and will continue throughout the meeting. An informal reception will be held in the OCCE Forum Building from 6-9 p.m. on Tuesday. On Thursday evening, May 30, the conference banquet will be held in the OCCE Commons at 7 p.m.

Participants staying at the OCCE are eligible to use campus recreation facilities. The swimming pool is across the street from the meeting site, and costs \$1. The Huston Huffman Physical Fitness Center is one-half block away (racquetball, squash, basketball, weightlifting, indoor running). The cost is \$3 per day, with multiple visits OK with receipt. A locker is \$1 extra if desired. Racquetball rackets may be rented for 50%. There are two strictly enforced rules at Huston-Huffman: (i) only white-soled shoes are permitted, and (ii) racquetball rackets must have scuff guards on the tip. Swimming and the Huston-Huffman Center both require a pass picked up at the Sooner House (or Walker Tower if you are in the dorm). Tennis courts are located one-half block away across Timberdell St. and usage is free.

HOUSING RESERVATION FORM

1985 ANNUAL MEETING

APS DIVISION OF ELECTRON AND ATOMIC PHYSICS

NORMAN, OKLAHOMA, 29-31 MAY 1985

Name _____

Address _____

City _____

State _____

Zip _____

Arrival Date _____

Time _____

Departure Date _____

(Checkout time is 2 pm)

CHOICE (Please indicate 1st choice, 2nd choice, 3rd choice, and 4th choice, since the meeting is likely to fill all housing except the dorm rooms.)

☐ (a) Sooner House twin bedroom with private bath:

☐ One person occupancy, \$27 each

☐ Two person occupancy, \$16 each

☐ (b) Hall of Advanced Studies suite, four single bedrooms sharing a living room and bath:

☐ One person occupancy, \$30 each

☐ Two person occupancy, \$17 each

☐ Three person occupancy, \$16 each

☐ Four person occupancy, \$15 each

☐ (c) Dorm room, two twin bedrooms sharing a bath:

☐ One person occupancy in one bedroom, \$16 each

☐ Two person occupancy in one bedroom, \$12 each

ROOMIES: ☐ Please assign roommates from among the other participants.

☐ I wish to share accommodations with _____.

PLEASE RETURN THIS FORM TO:

OCCE HOUSING
1700 Asp Avenue
Norman, OK 73037

All those who plan to attend the meeting should return the registration form, preferably by 28 April. Advance registration greatly simplifies the task of the local committee and will be appreciated. For the purpose of determining the correct registration fee, "student" includes unemployed and retired persons.

For further information write or telephone David E. Golden, Department of Physics and Astronomy, University of Oklahoma, Norman, OK 73069, (405) 325-3961.

II. CAMS WORKSHOP

The Committee on Atomic and Molecular Science (CAMS) of the NAS/NRC is sponsoring a workshop on November 9, 1984 on the subject of "VUV and X-ray Sources". The workshop will be held in the Lecture Room of the National Academy of Sciences Building, 2101 Constitution Avenue, Washington D.C. The Workshop is open to the public, and there is no registration or fee. The program for the workshop includes the following speakers and topics:

What Atomic and Molecular Physics Can Be Done with VUV and X-Ray Photons? - S. Manson

Synchrotron Radiation Characteristics - H. Winick

Tunable Coherent X-rays from Modern Synchrotron Sources - D. Attwood

Laser Radiation Characteristics - C. Rhodes

Laser Produced Plasmas - T. McIlrath

Free Electron Lasers - C. Pelligrini

In addition, there will be round table discussions of synchrotron sources, and of the relative merits of the various techniques of producing VUV and X-ray photons.

The workshop will convene at 8:30 AM and is expected to end at 4:30 PM. Individuals who would like further information on this workshop should contact Professor Lloyd Armstrong, Jr., Department of Physics and Astronomy, The Johns Hopkins University, Baltimore, Maryland 21218

III. COMMENTS SOLICITED ON PACS

The AIP is reexamining the usefulness of the Physics and Astronomy Classification Scheme, and would like some enlightened input from users. Do you use it for literature searches? Do you prefer key words? Would you prefer some other classification scheme? Is PACS sufficiently responsive to new or unconventional research areas?

Please write B. Bederson, Editor, Phys Rev A, POB 1000, Ridge, NY 11961 if you have any feelings on this subject, pro or con.

IV. RESEARCH FUNDS AVAILABLE AT NATIONAL LASER USERS FACILITY FOR EXPERIMENTS IN HIGH ENERGY-DENSITY PHYSICS

The U.S. Department of Energy has designated the Laboratory for Laser Energetics at the University of Rochester as a national facility, available to qualified researchers nationwide. The Department of Energy supports facility operation and provides research contracts for user experiments in laser fusion, plasma physics, and associated applications. Approximately \$750,000 of user research funds will be available for the next period. Proposals requesting allocation of facility time should be submitted to the users facility Manager by February 1, 1985. The users facility has accommodated 42 user experiments since 1979 in high energy-density studies, including such areas as thermonuclear fusion, spectroscopy of highly-ionized atoms, and laboratory astrophysics.

For more information about proposal guidelines and the resources available at NLUF, contact Thomas C. Bristow, Manager, National Laser Users Facility, Laboratory for Laser Energetics, University of Rochester, 250 East River Road, Rochester, New York 14623. (716) 275-2074

V. ANNOUNCEMENTS OF UPCOMING MEETINGS

1. The Thirty-Seventh Annual Gaseous Electronics Conference (GEC) will be held on 9-12 October at the University of Colorado in Boulder, Colorado. The meeting is a topical conference of the APS and is sponsored by the DEAP. In addition to papers on the physics of basic phenomena in ionized gases and "cool" plasmas, topics scheduled for particular attention this year include: radio frequency discharges, ion-molecule reactions, industrial processing of materials using electric arcs, chemical kinetics of molecules in excited states. Abstracts were due at the end of July, 1984. Inquiries should be directed to: Earl C. Beaty, Secretary, 37th Gaseous Electronics Conference, Mailstop 524.11, National Bureau of Standards, Boulder, CO 80303 (303) 497-3672.

2. The 5th Topical Conference on ATOMIC PROCESSES IN HIGH TEMPERATURE PLASMAS will be held at the Asilomar Conference Center in Pacific Grove, CA, 25-28 February 1985. The conference brings together atomic and plasma physicists and astrophysicists to review and discuss atomic processes in plasmas. Topics to be covered include: electron, ion, and photon collisions; structure and spectroscopy of highly ionized atoms; and, the role of atomic processes in plasma experiments and astrophysics. For further information see the APS Bulletin or write to the local committee chairperson: J. C. Weisheit, Physics Department, Mail Code L-297, Lawrence Livermore National Laboratory, P. O. Box 808, Livermore, CA 94550.

3. ICPEAC XIV will be held on the campus of Stanford University, July 24-31, 1985. It will be hosted by the Molecular Physics Department of SRI and the Physics Department of Stanford with Don Lorents and Walter Meyerhof as Co-chairmen. The focus of this International Conference is on electronic, ionic, atomic, and photo collision processes from the mev to Mev range. The conference format will be similar to that of The Berlin conference with the program consisting of invited plenary lectures, review and progress reports, special interest symposia, hot topic sessions, and poster sessions for all contributed papers. Eight satellite workshops and conferences on various special topics are being organized either before or after ICPEAC itself. The first announcement has been sent out but if you did not receive it or desire more information, contact D. Lorents, Chemical Physics Lab, SRI International, Menlo Park, CA 94025.

VI. UPDATE ON CHINESE-AMERICAN SCHOLARS PROGRAM

The program to host Chinese physicists in U.S. laboratories and research groups has been on-going on the East Coast for the last year. The intent in 1984-85 is to concentrate on establishing the program on the West Coast. In 1985-86 there will be an effort to establish the program in the Midwest (i.e. the whole country not including the coasts). The reason for geographic localization is to enable the Chinese scholars and their hosts to meet with each other periodically. The DEAP divisional representative to this committee is Ben Bederson.