

# Gazette

A Newsletter of the Committee on the Status of Women in Physics of the American Physical Society

## CALL FOR PRESENTATIONS AT CONFERENCE ON WOMEN IN MATHEMATICS AND THE SCIENCES

In November 1989, St. Cloud University, in St. Cloud, Minnesota, will host a two-day conference that will explore present efforts to encourage capable

women students to pursue undergraduate study in mathematics and the sciences. Substantial effort and research have been undertaken at the K-12 level, but the subject is frequently neglected at the undergraduate level.

The conference will aim to provide not just definitions and approaches to the underrepresentation of women in mathematics and science, but also a workshop opportunity for participants to troubleshoot some of their own institutions' problems and efforts in this area. The organizers hope that the conference will initiate a network through which the participants can get long-range support and consultation from other institutions.

Marsha Matyas of AAAS will be the keynote speaker, and directing the three different tracks of the conference will be Margaret Cavanaugh—Physical Sciences and Engineering (St. Mary's College, IN), Clare Woodward—Life Sciences (U. MN), and Sabra Anderson—Mathematical Sciences (U. MN—Duluth).

Presentations are now being solicited concerning planned or ongoing projects to make science and mathematics more hospitable to women, and methods for encouraging and supporting women as students and professionals. Presentations of analyzed data and/or how to gather data in the subject area also are sought. Methods for forming alliances and coalitions with high schools (students and teachers), community colleges, and industries also are desired topics for presentations. To the extent possible, presentations should offer material that can be used in workshop groups and taken back to the participants' home institutions.

Proceedings will be published. The conference is funded by the Ford Foundation, Honeywell Foundation, and

Cray Research. Write to the conference director (address follows) if you wish to attend as participant. To make a presentation, send an abstract of the proposed presentation and a brief vita to Dr. Sandra Z. Keith, Director, Conference on Women in Mathematics and the Sciences, Mathematics and Statistics Department, 720 4th Avenue, S., St. Cloud, MN 56301-4498. Phone: (612) 255-2282.

## MARGARET ROSSITER AWARDED MACARTHUR FELLOWSHIP

Margaret Rossiter, historian and author of the signal work, "Women Scientists of America," has been awarded a fellowship from the MacArthur Foundation of Chicago. The fellowships, commonly known as the "genius" awards, were established to allow exceptionally talented and accomplished individuals the freedom to spend several years in any way they choose, without obligation to produce work or account for their time.

"We believe in the power of the individual to contribute to American life," said Adele Simmons, president of the John D. and Catherine T. MacArthur Foundation. The *Gazette* extends its congratulations to Rossiter, along with gratitude for her work on a topic that is of interest and concern to its readers.

## BUNTING INSTITUTE OFFERS FELLOWSHIPS TO POST-DOCTORAL WOMEN SCIENTISTS

The Mary Ingraham Bunting Institute of Radcliffe College has received a \$1.7 million grant from the Office of Naval Research (ONR) to fund post-doctoral women scientists. The award will support the work of 45 women scientists from July 1989 through June 1995.

The editor for this issue is Ken Lyons;  
assistant editor is Amy Halsted.

### In This Issue:

- \* Call for Presentations at Conference on Women in Mathematics and the Sciences
- \* Margaret Rossiter Awarded MacArthur Fellowship
- \* Bunting Institute Offers Fellowships to Post-Doctoral Women Scientists
- \* Recipients of NSF Visiting Professorships for Women Meet in Washington
- \* Physics Colloquium Speakers List
- \* CSL Enrollment Form
- \* Roster Questionnaire
- \* National Physical Science Consortium: Fellowships for Graduate Women and Minorities
- \* Are You Interested in Serving on the CSWP?
- \* GE Foundation Continues Sponsorship of Maria Goeppert-Mayer Award
- \* "Physics in Your Future": Popular Career Booklet Reprinted
- \* Search for New Executive Secretary of the American Physical Society

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The "CSWP GAZETTE," a quarterly newsletter of the American Physical Society Committee on the Status of Women in Physics (CSWP), is mailed free of charge to all women listed on the computerized "Roster of Women in Physics," all US physics department chairs, and others on request. Because editorial responsibility rotates among CSWP members, please address all correspondence to: "CSWP Gazette," The American Physical Society, 335 East 45 St., New York, NY 10017.

the Mary Ingraham Bunting Institute, Radcliffe College, 34 Concord Avenue, Cambridge, MA 02138. Phone: (617) 495-8212.

**RECIPIENTS OF NSF VISITING PROFESSORSHIPS FOR WOMEN MEET IN WASHINGTON**

Contributed by 1988 CSWP Chair Ellen Zweibel, University of Colorado, Boulder.

Since its inception in 1982, approximately 150 women scientists have visited host universities under the auspices of the NSF Visiting Professorships for Women (VPW) Program. During these visits, which have a typical duration of one academic year, the awardee does research, teaches, and focuses some of her time on trying to improve in some way the position of women in her discipline. These awards are highly competitive; the application procedure includes a research proposal and these proposals are peer reviewed for scientific content. The success rate is somewhat less than for other categories of NSF proposal.

On 21 and 22 June, the NSF held a meeting for the 1988 VPW awardees. Among these 25 women were biologists, linguists, economists, anthropologists, mathematicians, engineers, computer scientists, geologists, three astronomers, and a physicist. Most of us came from universities, and ranged in rank from new assistant to full professor. There were women who had worked without interruption and women who had taken time off, women from four year colleges and women from major research universities. Everyone spoke about her research during the year, and I was greatly impressed by the enthusiasm and dedication common to all of us.

We also spoke about our activities to promote women in science. These ranged from informal mentoring of students to organized discussion groups to seminar series which might feature research colloquia by prominent women scientists or be devoted instead to gender and science issues. Among these experiences were two prominent threads. First, our presence had a great impact on the men as well as the wom-

en. Second, there is tremendous concern among women from student age onward that they cannot combine family life with a successful career, and this is cited as a frequent reason for dropping out at some stage. This concern has two aspects. First are the practical obstacles, including the difficulties couples face in finding jobs near each other, and the scarcity of affordable, competent help with childcare. But there is often a perception that many academics are prejudiced against women who want to have children, particularly before tenure. I came away convinced that I personally had underestimated the importance of this issue.

Finally, I learned something about the status of women in other scientific disciplines. Although the percentage of women in physics is lower than in almost all other fields, there are some problems in common: clustering of women in lower-ranking or nontenure track positions, underrepresentation among invited speakers and prize winners, lower salaries. I also learned that the CSWP is one of the most vigorous groups of its kind, and one of the few to receive materials support from its parent society—many of the women present were interested in finding out more about the activities of the CSWP.

My impression is that the NSF considers the VPW program to be successful and is committed to it. Each of us met with the appropriate program officer to discuss future funding, and the Foundation Director Erich Bloch spent an hour with the group. Certainly most of us, as individuals, found the program extremely rewarding. I urge any woman in physics to consider applying for it.

(Eligibility requirements are a doctorate in an NSF-supported field, independent research experience, and an affiliation with a U.S. institution. The applicant may not hold a salaried position at the proposed host institution at the time of application. All arrangements with the host institution are made by the candidate. Program announcements and application materials may be obtained from the Forms & Publications Unit, Room 232, National Science Foundation, Washington, DC 20550. Proposals must be postmarked no later than 15 November 1989.)

In 1990-91 the Bunting Institute will offer seven fellowships for women scientists through the ONR grant. Each science fellow will receive a research allowance plus a \$26,300 stipend, a private office, and the opportunity to affiliate with an appropriate laboratory or research group at Harvard or another major research university in the Boston area.

This year the Bunting Institute is launching a major outreach effort to increase the applicant pool for these fellowships. Applications for the 1990-91 program must be postmarked by 2 October 1989. Applications for this year and future programs are available from

# **PHYSICS COLLOQUIUM SPEAKERS LIST**

compiled by the

## **COMMITTEE ON THE STATUS OF WOMEN IN PHYSICS**

**August 1, 1989**

**Sec. I: Speakers by geographic area, with  
address and phone numbers.**

**Sec. II: Talk titles by physics subfield, with  
speakers' names and affiliations.**

# COLLOQUIUM SPEAKERS LIST ENROLLMENT/MODIFICATION FORM

The PHYSICS COLLOQUIUM SPEAKERS LIST is compiled annually by the American Physical Society Committee on the Status of Women in Physics. Comments or questions, as well as modifications or new entries for the 1989/90 CSL should be addressed to

Ken Lyons, 1A126  
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600 Mountain Ave.  
Murray Hill, NJ 07974

To modify an existing entry, or to make a new one, please fill out a copy of the form below and return it to the address above. PLEASE PRINT CLEARLY OR TYPE!

Check whether this is a modification of an existing entry (\_\_\_\_) or a new entry (\_\_\_\_). Today's date: \_\_\_\_\_

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Short name of institution (for use in second section of CSL): \_\_\_\_\_

Please check the box(es) below if you would be available for occasional "Career-Day" presentations to students in  
 Middle Schools  
 High Schools

Address: (please use no more than three lines of about 38 char maximum per line)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

zipcode \_\_\_\_\_

CSWP Roster registration number, if known: \_\_\_\_\_ Bitnet address: \_\_\_\_\_

To cancel a listed talk, give the title as it appears in the list and the section(s) where it is to be cancelled. If you wish to delete all old entries, just enter "ALL", and register the new titles in the next section. Use an additional sheet if necessary:

To register a new title, give the title as you want it to appear (first word and proper nouns capitalized) in the left column below. Then check the section(s) where it is to be inserted. Also check the top box if this is a CORRECTION of an existing title. If more than 4 talks are registered, please use an additional copy of this form, stapling them together.

<p><u>Title</u> 1.</p>	<p><input type="checkbox"/> CORRECTION</p> <p><input type="checkbox"/> Astrophysics    <input type="checkbox"/> Bio/Medical    <input type="checkbox"/> Chem/Statistical  <input type="checkbox"/> Cond. Matter    <input type="checkbox"/> Env/Energy    <input type="checkbox"/> Fluid/Plasma  <input type="checkbox"/> Geophysics    <input type="checkbox"/> Interface/Device    <input type="checkbox"/> Molec/Polymer  <input type="checkbox"/> Nuclear/Particle    <input type="checkbox"/> Accelerators  <input type="checkbox"/> Optics/Opt.Phys.    <input type="checkbox"/> Talks for General Audiences</p>
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<p><u>Title</u> 2.</p>	<p><input type="checkbox"/> CORRECTION</p> <p><input type="checkbox"/> Astrophysics    <input type="checkbox"/> Bio/Medical    <input type="checkbox"/> Chem/Statistical  <input type="checkbox"/> Cond. Matter    <input type="checkbox"/> Env/Energy    <input type="checkbox"/> Fluid/Plasma  <input type="checkbox"/> Geophysics    <input type="checkbox"/> Interface/Device    <input type="checkbox"/> Molec/Polymer  <input type="checkbox"/> Nuclear/Particle    <input type="checkbox"/> Accelerators  <input type="checkbox"/> Optics/Opt.Phys.    <input type="checkbox"/> Talks for General Audiences</p>
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<p><u>Title</u> 3.</p>	<p><input type="checkbox"/> CORRECTION</p> <p><input type="checkbox"/> Astrophysics    <input type="checkbox"/> Bio/Medical    <input type="checkbox"/> Chem/Statistical  <input type="checkbox"/> Cond. Matter    <input type="checkbox"/> Env/Energy    <input type="checkbox"/> Fluid/Plasma  <input type="checkbox"/> Geophysics    <input type="checkbox"/> Interface/Device    <input type="checkbox"/> Molec/Polymer  <input type="checkbox"/> Nuclear/Particle    <input type="checkbox"/> Accelerators  <input type="checkbox"/> Optics/Opt.Phys.    <input type="checkbox"/> Talks for General Audiences</p>
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<p><u>Title</u> 4.</p>	<p><input type="checkbox"/> CORRECTION</p> <p><input type="checkbox"/> Astrophysics    <input type="checkbox"/> Bio/Medical    <input type="checkbox"/> Chem/Statistical  <input type="checkbox"/> Cond. Matter    <input type="checkbox"/> Env/Energy    <input type="checkbox"/> Fluid/Plasma  <input type="checkbox"/> Geophysics    <input type="checkbox"/> Interface/Device    <input type="checkbox"/> Molec/Polymer  <input type="checkbox"/> Nuclear/Particle    <input type="checkbox"/> Accelerators  <input type="checkbox"/> Optics/Opt.Phys.    <input type="checkbox"/> Talks for General Audiences</p>
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PHYSICS COLLOQUIUM SPEAKERS LIST  
COMPILED BY THE COMMITTEE ON THE STATUS OF WOMEN IN PHYSICS

I. PHYSICS COLLOQUIUM SPEAKER INFORMATION, 1989/1990

This first section lists speakers, with addresses and phones, by geographic area (alphabetically within each subsection), together with references to the sections where talk titles appear. The symbol '\*' identifies those listed in the section for GENERAL AUDIENCES. The symbol '+' denotes individuals who have indicated an interest in working with high school (h+) or middle school (m+) students, where the '+' alone indicates both. The geographic abbreviations in brackets are used for reference in the second section, where specific talk titles are listed.

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## II. COLLOQUIUM TITLES BY FIELD

This second section lists the speakers and titles, grouped by physics subfield and alphabetically by speaker within each group. Refer to the first section for address and phone information on the speakers. The two-character abbreviation after each name refers to a geographic region in the first section, where full address information is given.

- |   |  |  |   |  |
|---|--|--|---|--|
| <b>ACCELERATOR PHYSICS</b>  |  | Dr. Belinda J. Wilkes, SAO [NE]  | Prof. Judith Herzfeld, Brandeis Univ. [NE]  |  |
| Dr. Eva Bozoki, Brookhaven [NE]   | 1. <i>Synchrotron radiation and its use</i>  | 1. <i>Quasars in full (multi-wavelength) view</i>  | 1. <i>Self-assembly in crowded solutions: Nonideality and long-range order</i>                                    |  |
| Dr. Ling-Lie Chau, UC Davis [SW]  | 1. <i>Frontiers in particle physics</i>  | 2. <i>Tour of the Universe</i>   | 2. <i>Solid-state NMR studies of light-driven proton pump</i>   |  |
| Dr. Gail G. Hanson, Indiana Univ. [MW]  | 1. <i>Physics and Detectors at the superconducting supercollider</i>                     | Dr. Dorothy S. Woolum, Calif. State-Fullerton [SW]   | Dr. Juliette W. Ioup, Univ. of New Orleans [SE]   |  |
| Dr. Dorothy S. Woolum, Calif. State-Fullerton [SW]                                      | 1. <i>Trace element microdistribution analysis by PIXE</i>                               | 1. <i>Meteorites and what they tell us about the solar system</i>  | 1. <i>The always-convergent iterative technique of deconvolution</i>  |  |
| <b>ASTROPHYSICS</b>   |  | 2. <i>Nucleosynthesis of the heavy elements</i>  | Dr. Marsha I. Lester, Univ. of PA [EC]  |  |
| Reta Beebe, NM State [SW]   | 1. <i>Winds and clouds of the giant planets</i>  | 3. <i>Interpreting solar system elemental abundances of the N=50 neutron shell</i>   | 1. <i>Photodissociation and photoionization of van der Waals complexes</i>  |  |
| 2. <i>The Voyager exploration of the giant planets</i>                                  | Dr. Beverly S. Cohen, NYU Med. Ctr [NE]  | <b>BIOLOGICAL AND MEDICAL PHYSICS</b>  |   |  |
| Dr. Bonnie J. Buratti, Caltech/JPL [SW]   | 1. <i>The icy satellites of Jupiter and Saturn</i>                                       | 1. <i>Deposition of ultrafine particles on the human tracheobronchial tree: A determinant of the dose from radon daughters</i> | Dr. Carmay Lim, Harvard [NE]  |  |
| 2. <i>The Mars observer mission: Return to the red planet</i>                           | 2. <i>Sampling airborne particles for estimation of inhalation exposure</i>              | 2. <i>Sampling airborne particles for estimation of inhalation exposure</i>  | 1. <i>Nonequilibrium effects in chemical kinetics</i>   |  |
| Dr. Bel Campbell, Univ. of NM [SW]  | 1. <i>Disks and jets in star formation</i>   | Margaret C. Foster, SUNY [NE]  | 2. <i>Dynamics of gas-surface interactions</i>  |  |
| Dr. Lynn R. Cominsky, Sonoma State Univ. [NW]   | 1. <i>Discovery of eclipses from an x-ray burst source</i>                               | 1. <i>X-ray microanalysis as a tool for physiology</i>   | Dr. Susan R. McKay, Univ. of ME [NE]  |  |
| 2. <i>X-ray and <math>\gamma</math>-ray reprocessing</i>                                | Dr. Suzanne Gronemeyer, St. Jude Hosp. [SE]  | Dr. Susan Lea, SFSU [SW]   | 1. <i>The random field problem: Phase diagrams and thermodynamics</i>   |  |
| 3. <i>The extreme ultra-violet explorer satellite</i>                                   | 1. <i>Clinical magnetic resonance imaging</i>  | 1. <i>Accretion onto magnetized neutron stars: numerical models</i>  | 2. <i>Spin glasses and chaos</i>  |  |
| Dr. Carol Jo Crannell, NASA [EC]  | Dr. Susan Lea, SFSU [SW]   | Dr. Susan Lea, SFSU [SW]   | 3. <i>Renormalization group methods and exactly-solvable models of phase transitions</i>                          |  |
| 1. <i>Imaging high-energy emissions from solar flares</i>                               | Dr. Arlene J. Lennox, Fermilab [MW]  | 1. <i>Accretion onto magnetized neutron stars: numerical models</i>  | Dr. Cherry A. Murray, AT&T Bell Labs [NE]   |  |
| 2. <i>Using balloon-borne platforms for observations of solar flares</i>                | 1. <i>Neutrons against cancer: The clinical experience at Fermilab</i>                   | Dr. Arlene J. Lennox, Fermilab [MW]  | 1. <i>Colloidal crystals</i>  |  |
| 3. <i>The physics of high-energy solar processes in solar flares</i>                    | Dr. Carmay Lim, Harvard [NE]   | 1. <i>Enzyme catalysis: Mechanism of ribonuclease A</i>  | 2. <i>Two-stage melting in two dimensional colloidal crystals</i>   |  |
| Dr. Katherine Freese, UCSB [SW]   | Prof. Eugenie V. Mielczarek, George Mason U. [EC]  | Prof. Eugenie V. Mielczarek, George Mason U. [EC]  | Dr. Kathie Newman, Notre Dame [MW]  |  |
| 1. <i>Fundamental physics and dark matter</i>   | 1. <i>Iron transport and storage compounds in living systems: Mossbauer spectroscopy</i> | 1. <i>Iron transport and storage compounds in living systems: Mossbauer spectroscopy</i>                                       | 1. <i>Ordering transitions in semiconductors</i>  |  |
| 2. <i>Baryogenesis: An explanation of the matter/antimatter content of the universe</i> | Dr. Marilyn E. Noz, NYU [NE]   | Dr. Marilyn E. Noz, NYU [NE]   | Dr. Mary Jo Ondrechen, Northeastern Univ. [NE]  |  |
| 3. <i>Magnetic Monopoles and cosmology</i>  | 1. <i>Local area networks in an imaging environment</i>                                  | 1. <i>Local area networks in an imaging environment</i>  | 1. <i>Predicting the spectroscopic properties of discrete mixed-valence systems</i>                               |  |
| Dr. Shadia R. Habbal, Ctr. for Astrophys. [NE]  | Dr. Elizabeth A. Rauscher, Tecnic Research [SW]  | Dr. Elizabeth A. Rauscher, Tecnic Research [SW]  | 2. <i>The role of polarizable bridging ligands in discrete molecular, conducting, and superconducting systems</i> |  |
| 1. <i>Exploring the dynamic nature of the magnetic field on the sun</i>                 | Prof. Geraldine L. Richmond, Univ. of OR [NW]  | Prof. Geraldine L. Richmond, Univ. of OR [NW]  | Dr. Mary Beth Ruskai, Univ. Lowell [NE]   |  |
| Dr. Martha P. Haynes, Cornell Univ. [NE]  | 1. <i>The spectroscopy of metal ions bound to proteins and polymers</i>                  | 1. <i>The spectroscopy of metal ions bound to proteins and polymers</i>  | 1. <i>Limits on stability of molecular ions</i>   |  |
| 1. <i>Extragalactic sociology: Environmental effects on galaxy evolution</i>            | Dr. Beverly A. Rubik, Temple Univ. [EC]  | Dr. Beverly A. Rubik, Temple Univ. [EC]  | 2. <i>Relative entropy in quantum statistical mechanics: inequalities, extremal properties, and estimation</i>    |  |
| 2. <i>Large-scale structure in the universe</i>   | Dr. Petra Schmalbrock, Ohio State [MW]   | Dr. Petra Schmalbrock, Ohio State [MW]   | Dr. Roberta P. Saxon, [SW]  |  |
| Dr. Christine Jones, Harvard [NE]   | 1. <i>Magnetic resonance imaging and spectroscopy</i>                                    | 1. <i>Magnetic resonance imaging and spectroscopy</i>  | 1. <i>Theoretical studies of multiphoton processes</i>  |  |
| 1. <i>Hot Gas in early type galaxies</i>  | 2. <i>Investigations of flow with magnetic resonance</i>                                 | 2. <i>Investigations of flow with magnetic resonance</i>   | 2. <i>Theoretical study of Rydberg molecules</i>  |  |
| 2. <i>Einstein x-ray images of the structure of clusters of galaxies</i>                | 3. <i>Pulse sequence development for magnetic resonance imaging</i>                      | 3. <i>Pulse sequence development for magnetic resonance imaging</i>  | Prof. Jodye Selco, Univ. of Redlands [SW]   |  |
| Dr. Deborah A. Konkowski, USNA [EC]   | Dr. Sara A. Solla, Bell Labs [NE]  | Dr. Sara A. Solla, Bell Labs [NE]  | 1. <i>Spectroscopy and kinetics of transient species</i>  |  |
| 1. <i>Cosmic strings</i>  | 1. <i>Statistical mechanics of neural networks</i>                                       | 1. <i>Statistical mechanics of neural networks</i>   | Dr. Sara A. Solla, Bell Labs [NE]   |  |
| Dr. Karie Meyers, Occidental College [SW]   | Dr. Audrey V. Wegst, [MW]  | Dr. Audrey V. Wegst, [MW]  | 1. <i>A statistical mechanics approach to optimization problems</i>   |  |
| 1. <i>Variability in Seyfert Galaxies</i>   | 1. <i>Medical physics in diagnostic radiology</i>  | 1. <i>Medical physics in diagnostic radiology</i>  | 2. <i>Statistical mechanics of neural networks</i>  |  |
| Dr. Nancy D. Morrison, U. of Toledo [MW]  | 2. <i>Quality control in nuclear medicine and diagnostic radiology</i>                   | 2. <i>Quality control in nuclear medicine and diagnostic radiology</i>   | <b>CONDENSED MATTER PHYSICS</b>   |  |
| 1. <i>The fundamental properties of massive stars</i>                                   | 3. <i>Placental transfer of radionuclides and fetal radiation dose</i>                   | 3. <i>Placental transfer of radionuclides and fetal radiation dose</i>   | Dr. Sheila Bailey, NASA [MW]  |  |
| Dr. Anneila Sargent, Caltech [SW]   | <b>CHEMICAL AND STATISTICAL PHYSICS</b>  |  | 1. <i>Advances in photovoltaics</i>   |  |
| 1. <i>Star formation</i>  | Dr. Nancy J. Brown, Lawrence Berkeley Lab. [SW]  | Dr. Nancy J. Brown, Lawrence Berkeley Lab. [SW]  | 2. <i>Space photovoltaics</i>   |  |
| 2. <i>Millimeter wave interferometry of star-forming regions</i>                        | 1. <i>Theoretical and experimental chemical kinetics</i>                                 | 1. <i>Theoretical and experimental chemical kinetics</i>   | Prof. Jill C. Bonner, Univ. of RI [NE]  |  |
| Dr. Virginia Trimble, USC [SW]  | 2. <i>Energy transfer</i>  | 2. <i>Energy transfer</i>  | 1. <i>Spin-Peierls transitions</i>  |  |
| 1. <i>Supernova: Bigger and better bangs</i>  | Dr. Sandra C. Greer, Univ. of MD [EC]  | Dr. Sandra C. Greer, Univ. of MD [EC]  | 2. <i>Quantum effects in spin dynamics</i>  |  |
| 2. <i>The universe you don't see: Existence and nature of dark matter</i>               | 1. <i>Chemical reactions and critical points</i>   | 1. <i>Chemical reactions and critical points</i>   | Dr. Meera Chandrasekhar, Univ. of MO [MW]   |  |
| 3. <i>Formation and evolution of close binary systems</i>                               | 2. <i>Equilibrium polymerization as a phase transition</i>                               | 2. <i>Equilibrium polymerization as a phase transition</i>   | 1. <i>Quantum wells under hydrostatic pressure</i>  |  |
|   |  |  | Dr. Shirley Chiang, IBM [SW]  |  |
|   |  |  | 1. <i>Scanning tunnelling microscopy of metals on semiconductors</i>  |  |
|   |  |  | 2. <i>Atomic force microscopy</i>   |  |
|   |  |  | 3. <i>Imaging molecules on surfaces by scanning tunneling microscopy</i>  |  |
|   |  |  | Dr. Deborah D. L. Chung, SUNY [NE]  |  |
|   |  |  | 1. <i>Intercalation and exfoliation of graphite</i>   |  |
|   |  |  | 2. <i>Ohmic contacts to III-V compound semiconductors</i>   |  |
|   |  |  | 3. <i>Superconducting composite materials</i>   |  |
|   |  |  | 4. <i>Carbon fiber composites</i>   |  |

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TOTAL YEARS OF PROFESSIONAL EXPERIENCE: (include postdoc but not grad school) \_\_\_\_\_

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Highest degree (check one)	FIELD OF PHYSICS	Current interest (check one)	CURRENT WORK STATUS (check one)	TYPE OF WORK ACTIVITY
				Please enter the numbers from the list below of the activities in which you engage most frequently, in order shown:
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5__	Chemical Physics	5__	(check up to two of the following:)	
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16__	Nuclear Physics	16__	CURRENT OR LAST WORK (please	
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24__	Space Physics	24__	7__ Industry	
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29__	Non-Physics	29__		

  

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11	Teaching - Secondary School			
12	Committees/Professional Org.			
13	Proposal Preparation			
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	RACE
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APS membership number:

(3 letters)      (6 numbers)

Thank you for your participation. The information you have provided will be kept strictly confidential, and will be made available only to CSWP members and APS liaison personnel. Please return this form to the address on the reverse.

The Roster of Women in Physics is compiled by the American Physical Society Committee on the Status of Women in Physics.  
(KBL for CSWP 8/5/88)

## **NATIONAL PHYSICAL SCIENCE CONSORTIUM: FELLOWSHIPS FOR GRADUATE WOMEN AND MINORITIES**

The National Physical Science Consortium, (NPSC) is a three-pronged program of graduate fellowships to improve the representation of women and minorities in the physical sciences, specifically astronomy, chemistry, computer science, geology, materials science, physics, and mathematics. The program supports fellowship recipients in the following ways:

- \* Paid tuition and fees plus a substantial stipend for each academic year at one of the participating nationally recognized universities,
- \* Paid summer employment and technical experience in the first year at a participating national or industrial laboratory,
- \* Mentors on campus and at the work-site.

Response to NPSC in its first year has been strong. One hundred and ten female and minority students applied to the 1988-89 program, and the program has awarded five of its first seven fellowships to women, all of whom are majoring in physics. Their names and graduate institutions follow: Mary Amann, University of Maryland; Leslie Lin, Harvard; Rebecca McGowan, University of Texas; Maryann Mycek, University of California-Berkeley; and Julia Smith, Caltech.

Posters, brochures, and applications are available from undergraduate and graduate school deans and physical science department heads, or can be obtained from Executive Director L. Nan Snow, University of California, c/o Lawrence Livermore National Laboratory, P.O. Box 808, L-716, Livermore, CA 94550.

### **ARE YOU INTERESTED IN SERVING ON THE CSWP?**

Many of our readers might be interested in the procedure for selecting members for APS committees, particularly the CSWP.

The final decision on committee membership is performed by the APS Committee on Committees (COC), but

they solicit recommendations for new committee members from several sources, particularly the present committee. Often, our recommendations constitute the only ones they receive.

While it is good for the present committee to have a role in the selection, it is not good that we are limited to our own personal acquaintances in making our recommendations. In thinking through the process this year, I realized that there might be many of you who would be interested in serving, and nobody knows it. The purpose of this writing is to ask you to let us know.

By the time this is published, the nomination process will be mostly complete for 1990, so I am actually thinking of the years 1991 and beyond. Now is a good time for us to develop a list for future reference. The usual term is three years, with three meetings per year, travel expenses paid. If you are interested in serving on the committee, I ask you to do the following. Please send me a letter stating your interest and include a (very) brief CV, with information on the positions you have held and the general subfields of your professional activity as well as activities related to CSWP concerns, and a brief statement of how you see the role of the committee, and your part in it.

In thinking of people to recommend, we (as well as the COC) try to maintain a balance of representation as far as subfield, type of workplace, and years of experience. The information requested above helps us to make informed recommendations.

Thank you for your help. Bitnet submissions are welcome (as are questions if you have them) and may be sent to [KBL@OPTIX.ATT.COM](mailto:KBL@OPTIX.ATT.COM).

Ken Lyons  
CSWP Chair, 1989

### **GE FOUNDATION CONTINUES SPONSORSHIP OF MARIA GOEPPERT-MAYER AWARD**

Since 1986, when the Maria Goeppert-Mayer Award was established, the GE Foundation has provided generous sponsorship of this unique award, the benefits of which extend far beyond the individual winners. The GE Foundation is pleased with the recognition of

women of accomplishment and female advancement in the physical sciences that has been achieved through the MGM award, and will sponsor it for another five years.

The award consists of \$2,000 plus a \$3,000 travel allowance for the winner to present lectures on her work at four institutions of her choice, and at the meeting of the Society at which the award is bestowed. Each winner to date also has spent a day at the GE Research and Development Center in Schenectady, culminating in a center-wide colloquium tailored for a scientific audience outside her specialty. Response to the MGM winners by staff at the Center has been strongly positive, and the winners report that their visits are very enjoyable.

Flyers announcing the 1990 Maria Goeppert-Mayer Award and eligibility information have been distributed to physics department heads, or are available from APS (address on page 2 of the *Gazette*).

The GE Foundation has two other programs that may be of interest to *Gazette* readers. In the "College Bound" program, a partnership is formed between the Foundation, an inner city school, teachers, parents, community organizations, museums, and universities, all of whom work to raise the school's college-going rate.

The "Faculty for the Future" program is a \$15 million, decade-long initiative to overcome the shortage of minority and women faculty in engineering, science, management, and business schools in the U.S. The program identifies universities to select eligible doctoral candidates in the targeted disciplines for financial assistance. These candidates also are offered "mentoring fellowships," if they choose to serve as mentors to undergraduate minority and female students. Teaching incentive grants follow to encourage new Ph.D.'s to join U.S. faculties, along with young faculty grants to get new faculty on the road to tenure.

### **"PHYSICS IN YOUR FUTURE": POPULAR CAREER BOOKLET REPRINTED**

The CSWP has mounted a successful campaign to reprint the career booklet entitled, "Physics in Your Future."

Since its original appearance in 1983, 30,000 copies of the booklet have been distributed to high school guidance counselors, teachers, and students and their parents, via individual requests and bulk orders. The popularity of "Physics in Your Future," and the continuing requests for it prompted the CSWP to undertake reprinting the booklet.

1988 CSWP Chair Ellen Zweibel of the University of Colorado drafted a proposal accepted by APS Council last January to reprint an additional 30,000 copies. The APS agreed to contribute half of the required funds, and generous donations from the Xerox Corporation, International Business Machines, and AT&T have provided the balance.

A prime reason for the success of "Physics in Your Future" is the broadness of its appeal and application. The text, written by Dinah L. Moché, a professor of physics at Queensborough Community College of the City University of New York, conveys the excitement and rewards of different physics careers on a level that guidance counselors and parents, as well as students, can appreciate. Almost all of the physicists pictured and profiled in the booklet are women: on the job, interacting

with colleagues, and working with experimental apparatus. The booklet is aimed primarily at junior and senior high school women, but the CSWP chose not to label the booklet as being "for girls," so that more students could benefit from the information it provides.

1989 CSWP Chair Ken Lyons of AT&T Bell Laboratories (Murray Hill, NJ) has been instrumental in the fund-raising effort, along with committee member Lee Pondrom of the University of Wisconsin. Single copies of "Physics in Your Future" are free upon request. Bulk orders are \$1.00 per copy for up to 100 copies, and \$.70 for more than 100 copies. To order, write to The American Physical Society, 335 East 45th Street, New York, NY 10017.

### **SEARCH FOR NEW EXECUTIVE SECRETARY OF THE AMERICAN PHYSICAL SOCIETY**

A search committee has been formed for a new Executive Secretary of The American Physical Society, to succeed W.W. Havens, Jr., who will retire at the end of 1990. Dr. Havens has been APS Executive Secretary since 1967.

The duties of the Executive Secretary, the senior management position in the

APS, can be summarized with deceptive ease. Together with the APS Treasurer and the Editor-in-Chief, the Executive Secretary supervises the supporting staff, arranges meetings of the Council, and provides information on established policies and procedures. He or she also oversees the scientific meetings of the APS, relations with subunits (sections, divisions, topical groups, committees), and liaisons with other scientific societies.

Chaired by 1987-88 APS President Val Fitch, the search committee seeks physicist candidates of significant reputation and with demonstrated managerial ability. The successful candidate must devote at least half of his or her time to APS, and should plan to continue part-time research, teaching or other professional activity, as do the other APS officers.

The search committee will recommend a candidate to the Council for election, and the new Executive Secretary will have a term of five years with renewal possible after review. The salary will be negotiated. The desired starting date is 1 September 1990. Inquiries, nominations, and applications should be sent to Professor Val Fitch, Jadwin Hall, Princeton University, P.O. Box 708, Princeton, NJ 08544.

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