

Although the master's degree will be awarded by Indiana University, students in the program will not enroll at IU full-time. Indeed, Month expects to see working professionals as well as graduate students and even undergraduates enrolling. The degree requires completion of 18 credits' worth of courses through the USPAS. In addition, students must do a thesis project and take courses in electromagnetism and classical mechanics at IU or another university.

Martin Reiser, who chairs the executive committee of the American Physical Society's division of physics of beams, calls the new master's degree program "an innovative idea." Having survived "the shock" of the Superconducting Super Collider's cancellation, Reiser says, the accelerator field is growing once again, as evidenced by the recent rise in USPAS attendance. Among the many projects now in the works is the National Spallation Neutron Source at Oak Ridge National Laboratory. "If it

survives Congress, that facility alone will be a major undertaking," Reiser says, "and there will be a need for many people to build and run it."

For information, contact the USPAS, Fermilab, MS 125, PO Box 500, Batavia, IL 60510; phone 630-840-3896; e-mail [uspas@fnal.gov](mailto:uspas@fnal.gov).

JEAN KUMAGAI

## Gehrz Will Be Next President of AAS

On 11 June, Robert D. Gehrz of the University of Minnesota will take office as president-elect of the American Astronomical Society. Next June, Gehrz will succeed Andrea K. Dupree as president of AAS.

Gehrz earned a BA and then a PhD in physics from the University of Minnesota, in 1967 and 1971, respectively. After a one-year stint as a research associate there, he joined the physics

and astronomy faculty at the University of Wyoming. In 1985, he returned to Minnesota as a professor of physics and astronomy and director of the university's two observatories. Gehrz's research expertise lies in infrared astronomy, including ground- and space-based infrared observations of classical novae, comets, luminous variable stars, galactic molecular cloud cores and starburst galaxies.

AAS also elected a new vice president: Virginia L. Trimble, a professor of physics at the University of California, Irvine, and a visiting professor of astronomy at the University of Maryland at College Park. Trimble, who holds a 1968 PhD from Caltech, is known for her studies of the structure and evolution of stars and galaxies. She has also done work on the history and sociology of astronomy and physics.

In other election results, R. Bruce Partridge of Haverford College was chosen education officer; Geoffrey W. Marcy of San Francisco State Univer-

## Web Watch: Web Access by E-mail

Occasionally we get requests from readers whose only Internet capability is e-mail. In fact, e-mail is all you need to access the Web, thanks to a number of servers that will retrieve documents and send them to you. A good starting point for information on this subject in general is "Accessing the Internet by E-mail," by "Dr. Bob" Rankin. Indeed, most of the information in this Web Watch is drawn from that source. His guide also spells out how to use e-mail to access other facets of the Internet, such as Gopher, FTP (file transfer protocol), Usenet newsgroups, WAIS (Wide Area Information Service), Netfind, Archie and Veronica.

▷ You can get your own copy of the latest edition of Dr. Bob's guide by sending an e-mail to [mail-server@rtfm.mit.edu](mailto:mail-server@rtfm.mit.edu) with only the following in the text space, or body, of the e-mail: **send usenet/news.answers/internet-services/access-via-email**

Alternatively, you can send an e-mail to the UK mail server [mailbase@mailbase.ac.uk](mailto:mailbase@mailbase.ac.uk) with only the following in the body: **send lis-iis e-access-inet.txt**

▷ Perhaps you would like to have Dr. Bob's instructions in, say, Chinese (cn or tw), Farsi (ir), Somali (so) or even Esperanto (eo). Volunteers have translated the guide into about 30 languages. Just send an e-mail to [BobRankin@mhv.net](mailto:BobRankin@mhv.net) with the following as the *subject* of the e-mail: **send accmail.xx** (replacing "xx" with the appropriate two-letter code). Files in languages that don't use the English alphabet will generally need to be uudecoded, and you may also need special font files. For a list of languages and related files available, use **send readme.txt** as the subject. For general information on accessing these files automatically from Dr. Bob, use **send help** as the subject. Naturally, the translations tend to be less up-to-date than the original. Now, on to a few of the servers. . .

▷ [agora@dna.affrc.go.jp](mailto:agora@dna.affrc.go.jp)

▷ [agora@kamakura.mss.co.jp](mailto:agora@kamakura.mss.co.jp)

To use these servers, send them an e-mail with a command line in the *body* of the e-mail. For example, to have PHYSICS TODAY's home page sent to your return e-mail address, the command line would be **send http://www.aip.org/pt/**

If you want the file sent to another address, say, [fred@phys.edu](mailto:fred@phys.edu), use **rsend fred@phys.edu http://www.aip.org/pt/**

Agora will send the page you've requested formatted in ASCII (text). Images are indicated by "[IMAGE]" or other alternative text. Links to other pages are indicated like numbered references in square brackets, with the addresses (URLs) of the links listed at the end of the document. The Agora help file is summoned with the simple command line **www** in the body of the e-mail.

Other Agora servers are listed in Dr. Bob's current instructions, but my tests in March and April suggest they are not on-line.

▷ [w3mail@gmd.de](mailto:w3mail@gmd.de)

▷ [getweb@usa.healthnet.org](mailto:getweb@usa.healthnet.org)

These two servers use the command "get" instead of "send." Use the command "help" to get their help files. The German W3mail server sends the actual html file, so if you have browser software you can use it to view the file. The Getweb server sends the requested page formatted in ASCII like the Agora servers. Many Web pages use forms—documents that are displayed with various "buttons" that can be set and with spaces where you can enter information or choices. Getweb lets you handle such pages by e-mail; send it this command for more information: **help forms**

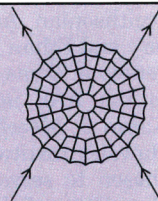
▷ [webmail@www.ucc.ie](mailto:webmail@www.ucc.ie)

With this server, use "go" instead of "send" or "get."

▷ Finally, a few notes about etiquette, quoted directly from Dr. Bob's guide: "The e-mail servers . . . are for the most part operated by kind-hearted volunteers at companies or universities. If you abuse (or over-use) the servers, there's a very good chance they will be shut down permanently. This actually happened to several of the e-mail servers in 1995 and 1996. If you have more direct Internet access, let others who are less fortunate use the e-mail servers. Try to limit your data transfers to one megabyte per day. Don't swamp the servers with many requests at a time."

Current and past issues of Web Watch are included on PHYSICS TODAY's home page, <http://www.aip.org/pt/>. If you have suggestions for other topics or sites to be covered in Web Watch, please e-mail them to [ptwww@aip.acp.org](mailto:ptwww@aip.acp.org).

Compiled by GRAHAM P. COLLINS







ROBERT D. GEHRZ

sity, Catherine A. Pilachowski of the National Optical Astronomy Observatories and David N. Schramm of the University of Chicago were elected councillors; and Mark J. Reid of the Smithsonian Astrophysical Observatory and Ethan T. Vishniac of the University of Texas at Austin were elected to the AAS nominating committee. Karen J. Meech of the University of Hawaii's Institute for Astronomy was chosen to serve on the US National Committee of the International Astronomical Union.

## Graduate Enrollments in Physics and Astronomy Plunge

Enrollments in graduate physics and astronomy programs in the US continue to decline, a recent survey by the American Institute of Physics has found. And so, while the number of graduate degrees in these disciplines has been on the rise in recent years, a sharp and sustained downturn in PhD production now seems inevitable.

In 1996, there were 2500 first-year physics grad students, down 5% from the previous year and down 26% since 1992. In astronomy, there were 149 first-year grad students in 1996, compared to 226 five years earlier. Although the decline is occurring among both US and foreign students studying in this country, it's been greater among the US ones. The survey report also noted that the drop seems to stem from student choice rather than from departmental policies intended to shrink graduate enrollments.

The number of physics bachelor's degrees—4263—hit a 30-year low in 1996.

Based on the number of junior-year physics majors, which has fallen by 20% over the past decade, this downward slide at the undergraduate level is likely to continue for at least two more years, the survey report concluded.

Enrollments in introductory physics courses remained strong, attracting some 380 000 college students in 1996. Introductory astronomy courses drew in about 150 000 students.

Single copies of the 1995–96 *Enrollments and Degrees Report* are available free of charge from the Education and Employment Statistics Division, AIP, One Physics Ellipse, College Park, MD 20740; phone 301-209-3070, e-mail stats@aip.org.

## IN BRIEF

The Australian Institute of Physics is accepting nominations worldwide for its 1998 Women in Physics Lecturer. The award will go to a woman who has made a significant contribution to physics research and who also has demonstrated public speaking ability. The winner will give a lecture tour in Australia for 2–3 weeks next summer, with accommodations and travel paid for. Lectures should be aimed at a general, nonspecialist physics audience. For more information, contact Judith Pollard, Department of Physics and Mathematical

Physics, University of Adelaide, Adelaide, 5005 Australia; e-mail jpollard@physics.adelaide.edu.au. Send nominations (self-nominations are welcome) with a 300–500-word supporting statement to Moira Welch, PO Box 283 Richmond, NSW, 2753 Australia; e-mail M.Welch@uws.edu.au. They are due by 15 July 1997.

Robert Hull, an associate professor in the materials science and engineering department at the University of Virginia, is the new president of the Materials Research Society. He succeeds Carl V. Thompson of MIT. Robert J. Nemanich, a professor of physics and associate member of the department of materials science and engineering at North Carolina State University, is MRS's new vice president and president-elect.

Anneila Sargent is the new executive director of Caltech's Owens Valley Radio Observatory in Big Pine, California. Sargent, a senior research associate at Caltech, uses millimeter radioastronomy to study star and planet formation. As executive director, she is responsible for both the observatory's scientific program and its administration. OVRO will celebrate its 40th anniversary next year.

## Solution to Last Month's Puzzle

1	S	L	A	B	5	G	H	A	T	9	F	A	I	T	13	S	L	E	E	T								
18	L	E	N	A	19	R	O	L	E	20	T	U	L	S	A	21	T	A	M	P	A							
22	O	T	I	S	23	A	M	I	E	24	O	N	A	I	R	25	A	D	M	I	N							
26	B	U	T	I	A	B	E	A	M	28	D	O	F	I	N	D	I	N	E	A	C	H						
30	S	P	A	N	N	E	R	S	31	A	H	A	32	O	E	D												
					33	G	N	U		34	E	R	O	I	C	A		35	E	P	I	L	O	G				
42	T	H	I	S	43	I	S	N	O	44	T	S	T	R	A	N	G	E	A	T	A	L	L					
48	R	E	H	O	E				49	S	A	T				50	T	A	U		51	T	E	S	L	A		
52	E	N	A	N		53	K	O	H	L			54	P	O	D	E	S		55	M	E	A	D				
59	A	C	T	I	N	O	N		60			61	O	L	A		62	E	V	O								
65	T	H	E	C	H	A	R	M	I	S	F	I	R	M	A	N	D	G	O	O	D							
					72	S	L	A	E		73	L	I	R	A		74	R	A	T	A	B	L	E				
75	G	L	E	E		76	A	D	Y	T	O	N		77	J	B	A	R		78	U	E	L	E				
84	L	O	G	E	S		85	I	O	U			86	A	A	A		87										
89	I	W	I	L	L	D	O	U	B	L	E	C	H	A	R	G	E	T	H	E	E							
95	B	E	S	S	I	E		96	R	A	I	N	I	S		97	E	R	R									
					98	M	E	R		99					100	B	C	D		101	C	O	A	R	S	E	S	T
106	T	H	I	S		107	S	I	S	108	A	V	E	R	Y	S		109	C	U	R	V	Y	T	U	N	E	
113	A	E	R	I	E		114	D	I	V	A	S			115	U	R	D	U		116	A	L	A	N			
117	L	I	A	R	S		118	O	V	E	R	T			119	P	I	E	R		120	R	E	F	S			
121	E	R	N	S	T		122	N	A	R	Y				123	S	E	R	E		124	T	R	U	E			