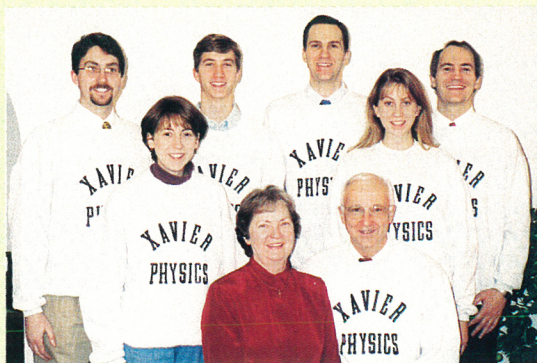


... and Brian Makes Seven

There are more physicists in this family than you can count on the fingers of one hand. Last month, when Brian Miller got his bachelor of science degree in physics from Xavier University in Cincinnati, Ohio, he was following in the well-worn footsteps of his father and five older brothers and sisters: From 1984 to 1992, Xavier awarded a BS in physics to a Miller child every two years, and



THE MILLER FAMILY. Back row (left to right): Donald, Brian, David and Joseph. Center row: Kathleen and Dianne. Front row: Parents Ruth and Raymond.

their dad, Raymond, earned his there in 1959. After earning his PhD from Johns Hopkins University in 1965 for his spectral studies of the aurora borealis, Raymond returned to Xavier, and he has served on its physics faculty ever since. The kids say they went to Xavier because it's a good school, has small classes, is cheap for faculty children and is near home. They majored in physics because they liked science, and because "Dad told us we could do almost anything with a physics degree," says daughter Kathleen. "He was the faculty adviser for all of us. And we used to joke about how freshman physics seemed to pop up on everyone's schedule regardless of their original major." Today, Joseph (who received his BS in 1984) creates computerized image analysis systems for the Procter & Gamble Co; David (1986) develops software for three-dimensional computer games; Donald (1988) is a professor at Indiana University's School of Optometry in Bloomington; Kathleen (1990) teaches high school physics and leads workshops on inquiry-based instruction; Dianne (1992) is pursuing a PhD in computer science; and Brian will start medical school this fall.

TONI FEDER

scope Science Institute) has been appointed to fill the council seat left vacant by David Schramm, who died in December. Arlo U. Landolt of Louisiana State University is serving another three-year term as AAS secretary. Richard Mushotzky of the Goddard Space Flight Center has been chosen to serve on the US National Committee of the International Astronomical Union.

IN BRIEF

The American Association of University Women has come down hard on single-sex education. Long debated as a means of fostering gender equity, all-girl math and science classes and single-sex schools have gained popularity in recent years (see *PHYSICS TODAY*, November 1995, page 73), especially following the release of the AAUW's influential 1992 report, *How Schools Shortchange Girls*, which drew wide attention to gender bias in the US public education system. Although the report did not endorse same-sex education, it did suggest that the approach be explored. The new study,

Separated by Sex: A Critical Look at Single-Sex Education for Girls looked at existing research on single-sex education in grades K-12 and found "no evidence in general that single-sex education works or is better for girls than coeducation" and that splitting up students by sex "can reinforce stereotypes about men's and women's roles in society." Factors like small classes, rigorous academics and a disciplined environment are more important in ensuring a good education for both girls and boys, the report found. Single copies of *Separated by Sex* are \$12.95 plus \$4 for shipping and handling and can be ordered from the AAUW Sales Office, P.O. Box 251, Department 455, Annapolis Junction, MD 20701; phone 800-225-9998; fax 301-206-9789.

The Physics Alliances Newsletter is a new on-line publication for high school and college physics teachers. Sponsored by the American Physical Society's Forum on Education, the newsletter is the reincarnation of an earlier publication put out by APS's and the American Association of Phys-

ics Teachers' now-defunct College-High School Interaction Committee. Rutgers University's Peter Lindendorf, who was the editor of the CHIC newsletter for ten years until the last issue appeared in December 1996, is the editor of the new newsletter. Computer simulations versus laboratory experiments for teaching physics is the topic of the first issue; anyone interested can visit APS's Web site, <http://www.aps.org>, and click on "Education and Outreach" to view or join the interactive discussion. Lindendorf plans to update the Web site every two to three months, and he welcomes suggestions and contributions.

The American Physical Society has created an award in honor of Francis M. Pipkin, a Harvard University physicist who died in 1992 (see *PHYSICS TODAY*, October 1992, page 134). Established by the APS topical group on precision measurement and fundamental constants, of which Pipkin was an active member, the award will recognize research "by a young scientist in the interdisciplinary area of precision measurement and fundamental constants." According to Colorado State University's Stephen Lundeen, who collaborated with Pipkin on a series of studies of the Lamb shift in atomic hydrogen, "Pipkin really personified the topical group—he did experiments in many areas of physics, and he had a special interest in making precise measurements. . . . And everyone who knew him, knew what an inspiration he was to young people." The first Francis M. Pipkin Award, which includes a \$2000 prize, will be given in 1999, at APS's centennial meeting in Atlanta. Nominations should be sent to Louis W. Anderson, Department of Physics, University of Wisconsin, 1150 University Avenue, Madison, WI 53706; phone 608-262-8962; fax 608-265-2334; e-mail lwanders@facstaff.wisc.edu. The deadline for nominations is 1 July.

Australia is joining the Gemini twin telescope project. It will ante up \$9.2 million, to add 5% on top of the \$184 million total construction cost and get 5% of the observation time on both 8-meter telescopes, located on Mauna Kea in Hawaii, and Cerro Pachon in Chile. A few years ago, Australia rejected an offer to join Gemini because, says former Australian Research Council chair Max Brennan, "the local astronomy community didn't unanimously support investments in an offshore site." Then, last year, Australia was poised to replace ousted Chile in the partnership—which also includes the US, the UK,

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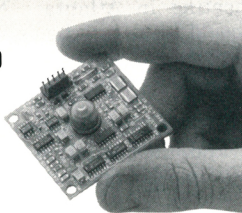
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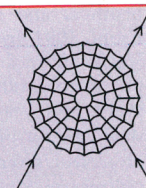
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Canada, Brazil and Argentina—but that country then paid its debts and reclaimed its member status (see PHYSICS TODAY, October 1997, page 94). As PHYSICS TODAY went to press, Australia's joining Gemini was expected to be formalized by the end of May, according to Wayne van Citters of the National Science Foundation, the partnership's executive agency. And, says project scientist Fred Gillett, "With Australia's contribution, we will be able to accelerate the schedule for new instrumen-

tation capability by about three years." Adaptive optics, a very-high-resolution optical spectrograph and infrared multiobject spectroscopic capability are among the instruments that will be installed ahead of schedule. The Gemini team also plans to extend viewing into the dawn and twilight hours by developing an infrared guider, which, Gillett claims, "will more than make up for time" that the six original partners will have to give up to make way for Australia. ■

Web Watch



► <http://adswww.harvard.edu/>

The NASA Astrophysics Data System's two leading components are its abstract service and article service. The abstract service includes four sets of abstracts: astronomy and astrophysics; instrumentation; physics and geophysics; and abstracts related to astronomy from the Los Alamos preprint server (see the April 1997 Web Watch). A comprehensive search form provides numerous ways to search the datasets, including searches of the astronomy set by object name. The returned references include links to on-line articles (for some, you will need an on-line subscription to the relevant journal) and on-line data where available. There is even a smart link to AltaVista's "Babelfish" translation service (<http://babelfish.altavista.digital.com/>), which lets you obtain a translation of a returned abstract *avec quelques dé clics de la souris*.

In the article service, over 40 000 journal articles have been scanned and are available as images for viewing and printing. For example, *Astronomical Journal* is available for volumes 51 to 114 (1944–97), and *Monthly Notices of the Royal Astronomical Society* includes volume 1 (1827) and volumes 147 to 278 (1970–96). More are on the way.

There is also a virtual library (at present with four books on-line), access to about 175 astronomical catalogs, and links to other astronomical data archives. Funded by NASA, the service is hosted by the Harvard-Smithsonian Center for Astrophysics and has mirror sites in Europe (<http://cdsads.u-strasbg.fr/>) and Japan (<http://ads.nao.ac.jp/>).

► <http://www.physics.ohio-state.edu/~jossem/ICPE/BOOKS.html>

Connecting Research in Physics Education with Teacher Education, edited by Andrée Tiberghien, E. Leonard Jossem and Jorge Barojas, has been published on the Web. This on-line book aims to "make available the results of research in physics education world-wide to physics educators working with pre- or in-service physics teachers." It is divided into four main sections: perspectives on physics and physics teaching; students' knowledge and learning; teachers' attitudes and practices; and planning and analysis of teaching situations. An international cast of contributors includes professors of education and physicists who have turned their attention to education issues. Editions in French, Spanish and Japanese are also planned. The book is a project of the International Commission on Physics Education, and was supported by ICPE's parent body, the International Union of Pure and Applied Physics, and the United Nations Educational, Scientific, and Cultural Organization.

► <http://abstracts.aps.org/>

Abstracts for papers to be presented at American Physical Society meetings can now be submitted using a form on the APS home page. A test form and advice on commonly used LaTeX symbols are also provided.

► All links mentioned in 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.

Compiled by GRAHAM P. COLLINS