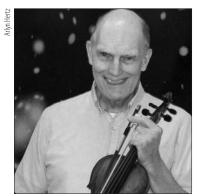
# Giving to the Department of Physics

BY ELIZABETH CHADIS, MARYGLENN VINCENS & ERIN MCGRATH



Hale Bradt

### HALE BRADT, PROFESSOR OF PHYSICS EMERITUS

This year, Professor Hale Bradt established a Fund from his IRA to support the Department's graduate students. The Fund, named in honor of Mrs. Barbara **E. Thomas**, undergraduate administrator in the physics education office from 1931–65, was established by Hale in appreciation of the physics department support staff: past, present and future.

"MIT has provided a wonderful environment for me to teach and to carry out research. I am exceptionally grateful for that and happy to be in a position

to give back," says Hale. "Besides," he adds, "I am told you cannot take it with you." From Hale's perspective, MIT's faculty retirement and associated savings plans have been sufficiently generous to enable him to have more than enough financial assets to live upon and to pass onto his children. He thus decided to take advantage of the 2006 tax law allowing for charitable IRA distributions by making a \$100,000 gift to the Physics Department, and incurring no tax hit from the IRS by doing so.

Hale Bradt entered MIT as a graduate student in 1955 and joined Bruno Rossi's cosmic-ray group as a research assistant the following year. "The group was small with only a half-dozen faculty and a similar number of students. Sputnik was launched and the group was soon involved in space experiments with rockets, balloons and satellites. The beginnings of celestial X-ray and gamma-ray astronomy took root in Cambridge, as did the exploration of interplanetary space. Bruno Rossi provided the primary inspiration and our immediate supervisors were younger faculty or staff members: Bill Kraushaar, George Clark and Herbert Bridge, among others. We were soon joined by radio astronomers Alan Barrett and Bernard Burke, plus theorist Phil Morrison, who broadened our perspective. Today, the astrophysics division of the department is a thriving community of faculty, postdocs and graduate students. I cast my lot with X-ray astronomy in 1966 and had a wonderfully exciting time observing the X-ray sky from space until my retirement in 2001." Hale recently completed his second textbook in astrophysics, Astrophysics Processes (Cambridge University Press), and has taken up the violin again with mixed results.

When Hale started lecturing 8.01 and 8.02 in 1961—his earliest years on the faculty—Mrs. Barbara Thomas was the "matriarch" of the Undergraduate Physics Office. At the time, she was an "elderly lady (born 1897), with an outsized, warm personality, who ran the office single-handedly. She managed the undergraduate courses, prepared course preparation materials, exams and grade assignments. It wasn't easy work: typewriters, mimeograph and 'ditto' machines were the technology of the day."

### Barbara E. Thomas (1897–1988)

For over three decades, Barbara Thomas was the principal face of the Physics Department administration for thousands of undergraduates. Until she retired in 1965, her warm greeting to each and every student was undeniably a major asset for the physics 'mission.' She revered the senior faculty in residence when she first arrived, always referring to them by title, as in "Professor Sears" or "Professor Frank." In contrast, the next generation of faculty, whom she had then known since they were students, went by their first names: department chairman William Buechner was "Bill" to her. Needless to say, junior faculty were mincemeat if they did not adhere to her strict quidelines for efficient course management, as Hale Bradt quickly discovered! Any recollections from members of the MIT physics community who knew Barbara are warmly encouraged, and can be emailed to physics@mit.edu.

> Hale Bradt decided to support the department's graduate students understanding full well the value of fellowships for entering students. As a former MIT physics graduate student, he can easily empathize with their situation. Fellowships provide more flexibility in the exploration of research fields as compared to research and teaching assistantships, and they help MIT compete for the best students.

His decision to name the fellowship in honor of Barbara Thomas evolved gradually. Last year, when the Physics Undergraduate Education Office (now known as Physics Academic Programs) moved to the Infinite Corridor during the renovation of the Green Center for Physics and the creation of the Pappalardo Community room, Hale says, "It struck and saddened me that the memory of the previous location (building 4-352), that was the focus of so many undergraduates over the years, would gradually be lost to memory. This then led me to think about Mrs. Thomas and the many staff who interface with our students and help make MIT physics a receptive and productive environment." He hopes others will join him in supporting the Barbara E. Thomas Fund and honor the dedicated staff of the Physics Department. Once the fund reaches \$1 million, it will be able to support a graduate student every year in perpetuity.

The Barbara E. Thomas Fund in support of physics graduate students has been established in the MIT Department of Physics. You may contribute to the Fund (#3312250) online at the MIT web site giving, mit.edu, by selecting "Give Now," then "Physics."

For more information about this fund, other physics funds and naming opportunities in the department, please contact Erin McGrath, Director of Development for the Department of Physics at 617.452.2807 or emcgrath@mit.edu.

### Giving to the Department of Physics

### GREEN CENTER FOR PHYSICS DONOR PROFILE: YALCIN AND SERPIL AYASLI



Yalcin and Serpil Ayasli

The airy conference room in the new Center for Theoretical Physics (CTP) is named in honor of Dr. Serpil Ayasli, a former postdoctoral fellow in the Physics Department, and the wife of alumnus Dr. Yalcin Ayasli. "I thought it would make a very nice anniversary gift," Yalcin said.

The couple's fond memories of the Department during Serpil's time in the CTP helped shape their decision to support Physics with a naming gift to the Green Center building project.

To Serpil, theirs is a family gift to MIT: "We are, after all, an MIT family." Not only was Serpil a postdoc (1979–82),

but Yalcin earned his Ph.D. from MIT in Electrical Engineering, and one of their three children, daughter Ceylan, earned an S.B. in Economics in 2000.

A surprise dividend to their gift was the discovery that the Serpil Ayasli Conference Room is located in virtually the same place on the third floor of Building 6 as Serpil's first lab. Serpil wrote at this time (with Prof. Paul Joss) what turned out to be a important 1982 theoretical paper on the modeling of thermonuclear X-ray bursts on neutron stars. Cited nearly 150 times in the literature, it's a paper that many groups, such as Prof. Deepto Chakrabarty's, have cited numerous times in their X-ray observational work on neutron stars.

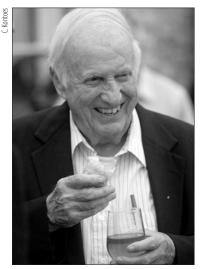
The Drs. Ayasli are originally from Turkey. Yalcin came to the United States to attend graduate school, returning to Turkey to teach. In 1979, he and Serpil came back to the United States together. Yalcin founded and headed Hittite Microwave, a company that develops and markets microwave technologies. Serpil worked for 23 years at Lincoln Laboratory and was an associate group leader when she retired in 2005. During her career there, she served on MIT's Council on Family and Work.

Yalcin has become a regular at the physics alumni breakfast events, enjoying in particular those featuring astrophysics.

## IN MEMORIUM: ) MORTON GOULDER '42

The Institute and the Physics Department lost a close friend and supporter this past year with the death in January of alumnus Morton E. Goulder '42.

A native of Ohio, Mort came to MIT to study Course XV, only to move on briefly to Course VI before finding his academic home in Course VIII. "Physics offered the interest and flexibility I needed," he once said.



Morton Goulder

Following graduation, Mort joined the United States Navy, which sent him back to MIT—to the Radar School, where he met his wife Claire, a lieutenant in the Marines. After the war and back in civilian life, he joined Raytheon, but within four years founded his own electronics firm, Sanders Associates, Inc., with ten Raytheon colleagues.

After two decades with Sanders, Mort joined the Carter Administration as Deputy Assistant Secretary of Defense for Intelligence and Warning Systems. Following his term in public service, Mort launched his own consulting and investment firm, M. E. Goulder Enterprises.

It was while managing the charitable activities at Sanders that Mort developed his philanthropic passion and skill. "I became very interested in how to leverage charitable funds to really accom-

plish some good," he said. "I believe that over the past 30 years at least half my time has been involved in charitable activities, widely diverse, stimulating and useful."

Involved with the Institute throughout his life, Mort once observed that "MIT is a much better place today," noting programs, such as UROP, that have been created to enrich students' lives.

Mort was a generous friend of the Physics Department: he supported several first-year graduate students with his Morton E. Goulder Expendable Fellowships; created the Goulder Presidential Fellowship, which he designated for the support of physics graduate students; and he gave to the Department's Green Center building project. Mort was active and generous across the Institute, serving on the Corporation Development Committee and funding the Goulder and Family Professorship in Environmental Systems.

## Giving to the Department of Physics

SUPPORT THE MIT DEPARTMENT OF PHYSICS

The MIT Department of Physics strives to be at the forefront in every field where new physics can be

found. By constantly pushing the limits, we have a chance to observe new general principles and to test theories of the structure and behavior of matter and energy.

We invite you to join us on this journey with your financial support. Please consider a gift on behalf of the MIT Department of Physics. As important as outright gifts are to the Department, deferred gifts and other tax planning approaches can often make a more substantial gift possible. Gifts in any amount to the Physics Department unrestricted fund provide the discretionary funds necessary to start new experiments and new science.

Attracting the best graduate students to work with our faculty continues to be our highest priority. We have established the Patrons of Physics Fellows to recognize friends of the Department who have made it possible for us to recruit the very best graduate students.

With your help, we will continue to understand the deepest aspects of nature, perhaps even the origins of space, time and matter. To make a gift, or for more information on making a gift, please contact:

Ms. Erin McGrath, Director of Development MIT Departments of Physics & Mathematics 77 Massachusetts Ave., Bldg. 4-309 Cambridge, MA 02139-4307

Tel: 617.452.2807

Email: emcgrath@mit.edu

You may also make a gift by going directly to the MIT web site at giving.mit.edu, selecting "Give Now," then "Physics," to reach one of the Physics Department Funds listed below:

2738023 Alumni Fellowship Fund for Physics

2657500 Physics Department Unrestricted

3312250 Barbara E. Thomas Fund