This has been a tough year for MIT. Budget deficits and reduced returns on investments have led to belt-tightening on many fronts, including a salary freeze for faculty and staff. Of most concern to us in Physics is a large increase in the tuition for graduate students charged to research grants. This, along with a big jump in the cost of medical insurance for graduate students, will result in a significant reduction in the number of students we can support.

Fortunately, some of our alumni have stepped in to help. George Elbaum (AA ’59) has made a commitment to support five graduate fellowships per year; Jim (PhD ’57, SB ’53) and Sylvia Earl have begun the endowment of a second fellowship — named for Bruno Rossi — after helping us establish the first one some years ago; Bill Layson (PhD ’63) has created an endowed fellowship; and John Castle (EC ’63), who is profiled in this issue, has begun the creation of another. Most of these fellowships will be used to support first-year graduate students. There are two important reasons for this: First, by offering a fellowship to a first-year student we can compete for the very best candidates, who receive fellowship offers from competing physics departments. Second, by supporting students in their first year, when they are taking courses and have less time to do research, we reduce the burden on the faculty research grants.

Two alumni have been especially generous. Neil (EE ’64) and Jane Pappalardo have renewed their support of the Pappalardo Fellowships in Physics program for another five years. This has already become one of the most prestigious postdoctoral fellowship programs in the world, and has attracted brilliant young physicists who enliven the atmosphere for teaching and research in the Department. Further, Neil’s challenge grant for the Green Center for Physics was met in record time because of a large gift from Virgil Elings (PhD ’66), who is also profiled in this issue. By this time next year, construction of the Green Center for Physics should be underway.
As you will see from these pages, our students and faculty continue to do exciting things. The article by Barton Zwiebach will give you a flavor of what he teaches in his new course on string theory for undergraduates; his book based on the course is available from Cambridge University Press. Isaac Chuang writes of his work on quantum computing; this is a field in which MIT has become the world’s leader, and about which Eddie Farhi recently spoke to alumni in the Bay Area. You will see that our faculty and students continue to garner prizes, including the prestigious Cosmology Prize of the Peter Gruber Foundation awarded to Alan Guth. And you can learn about our new faculty hires, made possible by the retirement of others. Dan Kleppner, who for many years has encouraged physics faculty to retire at a reasonable age, writes about his own experience with the transition to emeritus status.

We have received a wonderful response to our alumni/ae notes section, so keep the news coming. Our alumni are an increasingly important part of our community, and we enjoy hearing from you. And we rely more heavily than ever on your financial support. Let me take this opportunity to thank those of you who have contributed to the Department and encourage the rest of you to consider doing so.

With best regards,

Marc A. Kastner

ENDNOTES

1 MIT Professor of Physics Emeritus Bruno Rossi (1904–1993), a pioneer in cosmic ray studies, X-ray astronomy and interplanetary plasmas.
2 MIT Professor of Physics
3 MIT Associate Professor of Physics and Associate Professor of Media Arts & Sciences
4 MIT Professor of Physics and Director, Center for Theoretical Physics
5 MIT Victor F. Weisskopf Professor of Physics
6 MIT Lester Wolfe Professor of Physics Emeritus and Director, MIT-Harvard Center for Ultracold Atoms