

Physics 285

Is there life after graduate school?

Fridays 11-12, 416 P/G

It used to be simple. You finished your Ph.D., went on to a postdoc, and then got hired by a university, a national lab, or a company doing physics R&D. There were always exceptions—the physicists who helped found molecular biology, for instance—but the standard career path was pretty clear.

Life has changed. There are about 1100 new physics Ph.D.s granted per year in the United States, along with roughly 3000 physics postdocs, most of them looking for permanent jobs. But only about 400 tenured and tenure-track faculty jobs open up each year, and many of these are filled by people moving from industry or from other permanent positions. The situation in the national labs and the large corporate labs isn't much better: there has been a general pattern of cutbacks and a shift away from long-term research and toward short-term development.

This doesn't mean you'll be unemployed when you graduate. Very few physics Ph.D.s are jobless, and many high tech employers are still eager to hire physicists. But most new graduates will have to search farther afield for good, satisfying jobs, and will have to be flexible in a way past generations (i.e., most of your professors) weren't.

This spring quarter I will be organizing a course on career options for new physics Ph.D.s. We will bring in people from a variety of careers outside research universities, to talk about what they do, how they got their jobs (and how you might get a similar job), and what sort of background they needed. In the past, we have had speakers from computer companies (hardware and software), a laser manufacturer, a company that produces accelerators for medical use, an fiber optics company, semiconductor designers, and manufacturers, national labs, and small “teaching colleges.” Last year's seminar also included a “field trip” to Intel; we will probably arrange a similar trip this year.

The seminar will meet on Fridays from 11:00–12:00 pm in Phys/Geo 416, with time afterward for informal discussions. Announcements of each speaker will be posted, and if you sign up for the course, you'll get an email notification of talks.

If you're in your last two or three years of grad school, it's probably time to start worrying, at least a little, about what comes next. This seminar series will at least give you some extra information, and may, in a few cases, even lead to specific job leads.

Steve Carlip