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Got Skills? On-the-Job Activities of Physicists

RACHEL IVIE, American Institute of Physics

It goes almost without saying that physics doctorates do a lot more than just physics research or teaching at their jobs. But what exactly do they do? First, I will share basic data showing where physics doctorates are employed. Then I will present data from two of AIP's surveys about the employment of physicists. The first set of data comes from our survey of physics PhDs one year after doctorate. We will consider how often physics doctorates do a variety of activities on the job, including management, technical writing, teamwork, design and development, programming, and advanced mathematics. The second set of data comes from AIP's new survey of PhDs in physics 10 to 13 years after graduation. Data for many of the same activities will be shown for physics doctorates who have been in the workplace about a decade. Depending on the type of job, most industrially employed physics doctorates do some type of physics at work, but they are also very likely to report managing projects, writing for technical audiences, working on a team, and collaborating with non-physicists, among many other activities. This examination of the types of activities physics doctorates perform in the workplace will provide insight on the non-scientific training that would benefit graduate students the most.