

# Phys 7857 Graduate Seminar

## “How to get a job in physics”

Today: going on an academic interview

Postdoctoral positions are usually offered without interviewing the candidates.

Faculty positions involve an on-campus interview (perhaps after a phone interview).

Usually being interviewed means that one has made it to a “short list” of 3-5 candidates from where they will select the one that gets the job.

The other candidates are not usually disclosed to you, though there are ways of finding out (e.g. checking online who gave talks in the same timeframe as you did).

There also exist various “rumor mills” on the internet:

Theoretical Particle Physics <http://particle.physics.ucdavis.edu/rumor/doku.php>

Experimental Particle Physics <http://www.freewebs.com/heprumor/>

Nuclear Theory <http://www.phys.washington.edu/users/savage/NucRum/NTrumors.html>

Astro <http://cdm.berkeley.edu/doku.php?id=astrophysicsjobs>

Condensed matter/AMO <http://www.freewebs.com/cmamo/index.htm>

Germanic/Nordic high energy <http://members.fortunecity.com/gasdrumor/>

UK <http://pyweb.swan.ac.uk/~pybl/rumours/>

The interview consists of a 1-3 day visit in which you will have appointments with various faculty members, the department chairperson, the dean of the college. You will give a “colloquium style” talk and have meals with faculty.

The meetings have a three-fold purpose:

- a) The faculty members will try to impress you with their research.
- b) They would like to learn about you (your research but also your personality).
- c) You will use them to collect information about the place.

You, of course, are more interested in b) and c).

It is a good idea to inform yourself about the place. These days it is relatively easy using the web. This will allow you to get out of tight spots in conversation and to appear alive and entrepreneurial rather than naïve and disoriented.

Usually you are given a schedule of the visit the day before (either in person or by email). You can use this the night before the interview to brush up especially on details of the faculty members you are going to meet.

## Things people want to know about you:

Your research: what is it about? Are you going to be successful and bring good reputation to the department? Are you going to be able to get tenure? Are you going to be able to get funded, establish a research group, publish frequently?

You should practice a little speech to have ready answering all of these questions implicitly. Prepare a couple of versions, one for people closer to your area of research and another for people more distant. If you are meeting a dean that is not a physicist, you should think about what to say there as well.

People also will be gauging what kind of colleague you are going to be. Are you going to be a team player that helps shoulder the burdens of running a department? Are you going to be a nuisance at faculty meetings?

It is therefore good practice to be very careful in how you interact with people. This includes all settings (dinners, etc). There is **no moment during an interview when you are not being interviewed**. Obviously be careful about alcohol. And also about jokes. In general behave in a business-like matter. Don't treat anyone as a friend.

## Things you want to know about the place:

Stuff that is not online.

You may want to get a sense of what kind of place is the department to work in. Are there factions and contentious feuds? Is it run democratically? How is the chairperson (s)elected?

What are the expectations to grant tenure and promotion? How many years does it usually take to be a full professor. How does the pre-tenure period work (some places have two year reviews, some three).

What kind of teaching and administrative work is expected of an assistant professor? Is there formal mentoring? A written faculty handbook?

What about the location? House prices? Where do people live?

In principle you should get answers to these questions from the department chairperson, but it is wise to repeat some of the questions to other faculty members to get a more complete picture.

How thorough you have to be depends a bit on the place. Large research universities tend to have more or less standardized practices. There is wider variation in smaller schools. Very complete list at

<http://www.dartmouth.edu/~gradstdy/careers/services/interview/acad.html>

## **Things to ask the department chairperson:**

What salary level to expect. Is it for 9 or 12 months? How does it get paid?  
How do raises work?

What kind of start-up package is typical? What has to be paid from it (office renovations, telephone, internet).

What kind of space are you expected to get? What happens if you get funded and hire graduate students and/or postdocs?

How does teaching get assigned. Can one buy out? Can one double teach one semester and not teach the next?

Usually they will give you a package from HRM with benefits, retirement, etc.  
If they don't, ask.

What about the big picture? Where is the department going? New hires in the near future? What is the big picture for your particular subfield.

Some of these items may be raised by you or by the chairperson and there may be some back and forth (salary, startup).

## **Things to ask the dean:**

Big picture. Where is the college going? What is the role of your department in it?

Expectations for promotion and tenure.

Sabbatical policies.

How does the dean interact with the department. How are new faculty positions decided.

Any of the previous slide's questions the department chairperson did not answer.

Details, details...

Attire: try to dress conservatively and neutral. For men a jacket and tie will never be overdress, though a suit may be close to overdress. Women may want to consider attire where one can pin a lapel microphone. Try in general to look like you belong in the place. Avoid excessive jewelry. Try on the clothes before the trip! Avoid excessively uncomfortable clothes. You'll be on your feet and walking a lot, and stressed. You may perspire a lot...

Usually your talk will be in your laptop. Inquire ahead about connections to projectors and try to get a chance to try them out ahead of the talk. It is a good idea to bring it in a pen-usb drive as well, and to have it stored in a network accessible place as well.

Costs of the interview are usually covered by the institution. Keep receipts just in case. Try not to create undue hassles with reimbursements.

Some places will pick you up at the airport (so dress reasonably even during the flight). Others will ask you to take a taxi. If you can, try to tour the place of the interview the day before to familiarize yourself.



## **The job talk:**

You will be asked to give a talk. Usually the whole department is invited to attend. The talk is very important, since many faculty members will only see you at the talk. How you handle the various aspects of giving a talk can tell a lot about you.

Usually job talks are “colloquium style”, i.e. addressed at the level of a beginning grad student in physics. Keeping the talk broad, attractive and non-technical will please the audience. However, the talk should also show you are a master of your field. A good strategy is to spend a good fraction of the talk (half) giving a true colloquium level presentation, and towards the end switch gears a bit and show off your stuff.

Q&A: Again it tells a lot about you. Listen to the questions carefully and try to understand them.

## **The offer and the negotiation:**

If you get the job, you will typically get a call from the department chairperson making the offer verbally and announcing that a written offer will be on the way shortly. In the call the terms of the offer will usually be described and usually there will be in line with what you discussed in the interview.

If there are large discrepancies, you may want to tactfully ask why. Remember that you don't have an offer yet. You only have it when it is in writing and from someone appropriately authorized (e.g. chairperson with dean's signature).

It is better to get an actual offer even if it low-balls the terms you wanted than to not get any because you raised an enormous fuss about discrepancies during the phone call.

After you get the offer in writing, you can still negotiate various points, it does not cost much to generate amended offers later.

How hard should you negotiate? That depends a bit on personality. Remember that this will be the only chance at that particular institution where you have leverage to request stuff. Once you sign up, anything you need will have to be asked for politely and it may or may not be given to you. The only chance to get further leverage is to get an offer from another institution. Try to focus on what is really important.

# Resources:

These sites contain a lot more details and info. They are not specific to physics.

- **Academic Job Interview Advice, Mary Corbin Sies**, Department of American Studies, University of Maryland, College Park. <http://www.otal.umd.edu/~sies/jobadvice.html>
- **LANDING AN ACADEMIC JOB: The process and the pitfalls** Jonathan A. Dantzig Department of Mechanical and Industrial Engineering University of Illinois at Urbana-Champaign  
[http://ccrma-www.stanford.edu/~unjung/guide/academic\\_job.html](http://ccrma-www.stanford.edu/~unjung/guide/academic_job.html)