Academic Job Search in Mathematics for New Ph.D's

This information concerns the process of finding an academic job in mathematics. There are jobs for mathematicians in business and industry. If you are interested in such a position, the following will probably not be much help, and you should seek out and talk to people who know about those types of positions. Also, the timetable below describes the situation in the U.S. If you are interested in working outside the U.S., the timing may be different.

- A. Timetable (for tenure-track or postdoc positions)

 Timeline of the year prior to the beginning of the job:
 - July/August: busiest time for posting of job advertisements (sometimes 50 or more a week)
 - October: first deadlines for applications (some are even earlier). Most notably, NSF postdocs.
 - late November/early December: most deadlines for applications
 - December/January: preliminary interviews, some offers made (most later)
 - February/March: Offers/interviews for postdoc positions, campus interviews.

B. Where to find out about jobs

- www.ams.org. Go to Employment Services link. Then link to Job Ads. Listing of a wide variety of academic jobs (from semester-long visiting positions to department head at top universities).
- Advisor and committee. These people are familiar with your work and probably know people at other places with similar interests.
- Conferences in your research area. Have chance to meet people who may be interested in hiring you someday (or may know of someone who is).

 Networking. Keep in touch with people who have graduated or that you have met at conferences. Let people know that you're looking for a job.

C. Application Materials

- 1. Vita. Academic summary. See the article "Academic job search in mathematics" by Thomas Rishel linked to AMS Employment Services page, under "Academic Job Search Booklet", for some guidelines on preparation. Include personal information, relevant work experience, education, research interests, publications, talks, teaching experience, awards, other academic activities and a list of references.
- 2. Cover Letter. One page letter. Indicate which position you are applying for and why. Describe your background, indicate that letters of recommendation will be sent separately, and list supporting documents that you are sending. Personalize if possible (particularly for smaller schools). For different types of jobs, you may want to have different cover letters (liberal arts college vs. research university). If you are applying to more than a couple of places, use mail-merge program: letter template plus a data file.
- 3. Letters of Recommendation. Sent separately. Three or four usually required. At least one should address teaching. Think about who you want to write them for you. Give each letter writer at least one month to write it.
- 4. Research Statement. Keep it short (couple of pages). Address to someone in your (broad) research area, and to a certain extent a general mathematical audience. Summarize what is/will be in your thesis and other work, and briefly describe your methods and ideas. Place your work in context: why is this work interesting or important? What are some logical next steps for your work? Avoid technical details and complicated notation as much as possible.
- 5. Teaching Philosophy. Short (2 pages or so) statement describing your teaching experience, methods and philosophy. For instance, how do you approach homework, use of technology, group learning, student projects, etc? Describe your teaching style. Give specific examples.

- 6. AMS Coversheet. Summary of personal data, education, research interests and a list of your references. Can be downloaded from the AMS page or copied from the back of the Notices.
- 7. Transcripts. Some places require both undergraduate and graduate transcripts. It can take time and money to acquire them. Unoffical copies are almost always OK at least initially.
- 8. Other. Some places require additional materials, such as a statement on teaching in a liberal arts environment, or a short essay on generating interest in an undergraduate program.

D. Joint National Meetings (held in early January)

- Employment Center. Many institutions send representatives to the meetings to interview applicants. If you plan to attend, include this in your cover letter. Need to register ahead of time.
- Consider giving a talk. Deadline for submitting an abstract is late September or early October.