

## 1 Preface

In graduate student life, it is not infrequent that we discuss the difficulties of the PhD program – and ways to cope – among ourselves informally. One of the primary goals of this workshop is to open up a dialogue about our experiences in a more structured setting. The purpose of this document is to give you, our participants, some thought-provoking questions to inspire discussion and elicit your own questions.

## 2 Strategies for success & building community (Day 1)

### 2.1 Reflecting on recent experiences

- What contributed to your successes over the last year (or two)? What hindered your ability to succeed?
- When you have faced failures, whether this means failing a comp, not doing as well on an exam or homework as you had hoped, or simply not getting as much done as you had planned to, what did you learn from the experience?
- How did you adjust from undergraduate to graduate studies? What made you feel adequately or inadequately prepared?
- What have you chosen to prioritize in your graduate studies? (i.e. research and/or connecting with faculty, coursework/passing comps, teaching, living life outside of school, etc.) How has this helped or hurt you in reaching your goals?
- How has the particular structure (or lack thereof) of the PhD program contributed to your successes and/or failures in your studies?
- What do you wish you knew before entering graduate school?

### 2.2 Connecting with your peers

- How has the graduate student body contributed to your experience in your coursework?
- What are the greatest resources you have found, and how have you utilized them? Are there resources you know about which you have not used?
- Have you approached coursework (problem sets, studying for exams, presentations if applicable) collaboratively, on your own, or a mix of both? What did you learn from each approach that you could not have learned from the other?

- Has finding community been accessible to you? (e.g. maybe it is easier living on campus, maybe it is easier having a car, maybe it is harder without being frequently on campus or in an office space, maybe it is easier living in a co-op and/or having lots of relationships outside of the department)
- How do you keep perspective?
- Have you been able to find mentors and/or support from more experienced students?
- Have you been able to find faculty or supervisors who you know and trust? How have these relationships, or lack thereof, influenced your experience in the department?
- What has made you feel included socially in the department? Are there times where you have felt excluded?

### 3 Starting research & mathematical tastes

#### 3.1 How we approach research: an extremely vague word

- What excites you about being able to do research? What scares you about having to do research?
- How do you set expectations for yourself? How do you set boundaries? (i.e. when you work, when you schedule breaks)
- Doing research means, in a sense, your work never has an end! How might you avoid getting overwhelmed?
- Advisors vary greatly in how they work with students. What type of approach from an advisor is preferable to you? Do you need more or less explicit direction?

#### 3.2 Finding your flavor

- How have you identified what math you like and dislike?
- How has this been influenced by classes, professors, and/or peers?
- Sometimes the most challenging problems can be the most satisfying to solve. This can be appealing... or not. How do you distinguish between a challenge you like and a challenge you don't like?
- Of course, there are classes we are required to take regardless of whether we enjoy the material. How do we cope with subjects we dislike but must study? How do we stay passionate about our studies when doing math we dislike is compulsory?
- When is it important to keep an open mind? When might it be okay to close a door completely?

### 4 On being a graduate TA

For conversation in conjunction with a talk by Dr. Emily Olson.

- What does it mean to be a good TA and why is it important? When can our labor as TAs be helpful or harmful to our math careers?
- How have you noticed a gendered division of labor in your work as a TA?

- A couple of months ago, Mina Nahvi gave a talk about the “front and back of mathematics.” How has being a TA changed your perspective on mathematics? Does this change your perspective on being a student?
- What are the difficulties in balancing your duties as a TA with your own studies?
- How has your experience as a TA influenced your career goals?
- How has being a TA influenced your views on higher education?