

## REU: TENTATIVE GRADUATE STUDENT ASSIGNMENTS

The calendar of the program, with duties of undergraduates is:

- Week 1 (June 23 – 27) Orientation and YSP training sessions
- Week 2 (June 30 – July 3) YSP duties 9 a.m. - 2:30 p.m.
- Week 3 (July 7 – 11) YSP duties 9 a.m. - 2:30 p.m.
- Week 4 (July 14 – 18) YSP duties 9 a.m. - 2:30 p.m.
- Week 5 (July 21 – 25) YSP duties 9 a.m. - 2:30 p.m.
- Week 6 (July 28 – August 1) SESAME duties either morning or afternoon
- Week 7 (August 4 – 8) SESAME duties either morning or afternoon
- Week 8 (August 11 – 15)

Tentative assignments: feel free to complain or make alternative requests. There are many factors that may lead to later changes: attendance at the various courses, developing mentor relationships, DRP, etc.

From Mathematics:

- \*Mohammed Abouzaid [Farb–Hruska, May]
- \*Jayadev Athreya [Hruska, Constantin]
- \*David Balduzzi [Babai (weeks 1–4), Fefferman, Kirr, Santosa]
- \*Angela Barnhill [Herrmann]
- \*Andrew Blumberg [Fefferman, Santosa, May]
- \*Jeff Clouse [Fefferman, Kirr, Santosa, May]
- \*Jeremy Copeland [Babai, Constantin, Presentations]
- \*Matthew Day [Farb, May]
- \*Nick Gurski [Farb–Hruska, May, Lewicka]
- \*Gautam Iyer [Constantin, Lewicka]
- \*Sanjeevi Krishnan [fefferman, Kirr, Santosa, May]
- \*Craig Jackson [Farb–Hruska, Lewicka]
- \*Ben Lee [Herrman, Santosa, May]
- \*Sharon McCathern [Herrmann]
- \*Mridul Mehta [Kirr, Santosa, Babai (weeks 5–8)]
- \*Courtney Morris [Farb–Hruska, May, Presentations]
- \*Ann Scheels [Fefferman, Kirr, Santosa, Constantin]
- \*Kacey Walker [Herrmann, Santosa, Constantin, Presentations]
- \*Ben Wieland [Babai (weeks 5–8)]
- \*Dani Zarnescu [Constantin, Lewicka]

From Computer Science:

- \*Ivona Bezakova [Babai]
- \*Varsha Dani [Babai]
- \*Tom Hayes [Babai]
- \*Daniel Stefankovic [Babai]

List of courses with graduate student assignments:

1. DISCRETE MATHEMATICS, Laci Babai (weeks 1–8)

The first module (weeks 1–4) will focus on the interaction between linear algebra, combinatorics, and algorithms. The second module (weeks 5–8) will focus on combinatorial and algorithmic aspects of finite groups.

Ivona Bezakova, weeks 1–8  
 Varsha Dani, weeks 1–8  
 Tom Hayes, weeks 1–8  
 Daniel Stefankovic, weeks 1–8  
 David Balduzzi, weeks 1–4  
 Jeremy Copeland, weeks 1–4  
 Mridul Mehta, weeks 5–8  
 Ben Wieland, weeks 5–8

2 KNOTS and LINKS, Benson Farb (weeks 1–2), Chris Hruska (weeks 3–4)

Mohammed Abouzaid  
 Jayadev Athreya (weeks 3–4)  
 Matthew Day (weeks 1–2)  
 Nick Gurski  
 Craig Jackson  
 Courtney Morris

3. INTRODUCTION TO GROUPS AND GEOMETRY, Diane Herrmann (weeks 1–2)

Angela Barnhill  
 Ben Lee  
 Sharon McCathern  
 Kacey Walker

4. INVITATION TO PROBABILITY THEORY, Robert Fefferman (week 1)

David Balduzzi  
 Andrew Blumberg  
 Jeff Clouse  
 Sanjeevi Krishnan  
 Ann Scheels

5. TOPICS IN ODE'S, Eduard Kirr (week 2)

David Balduzzi  
 Jeff Clouse  
 Sanjeevi Krishnan  
 Mridul Mehta  
 Ann Scheels

6. MATHEMATICS IN INDUSTRIAL APPLICATIONS, Fadil Santosa (weeks 3–4)

David Balduzzi  
Andrew Blumberg  
Jeff Clouse  
Ben Lee  
Mridul Mehta  
Sanjeevi Krishnan  
Ann Scheels  
Kacey Walker

7. FOLLOW UP ON AN INTIVATION TO PROBABILITY THEORY: MARKOV CHAINS, MARTINGALES, AND MORE . . . , Peter Constantin (weeks 5–6)

Jayadev Athreya  
Jeremy Copeland  
Gautam Iyer  
Ann Scheels  
Kacey Walker  
Dani Zarnescu

8. FINITE TOPOLOGICAL SPACES, Peter May (weeks 5–7)

Mohammed Abouzaid  
Andrew Blumberg  
Jeff Clouse  
Matthew Day  
Nick Gurski  
Sanjeevi Krishnan  
Ben Lee  
Courtney Morris

9. INTRODUCTION TO TOPOLOGICAL DEGREE IN EUCLIDEAN SPACES, Marta Lewicka (weeks 7–8)

Nick Gurski  
Gautam Iyer  
Craig Jackson  
Dani Zarnescu

10. STUDENT PRESENTATIONS (week 8)

Organizers:  
Jeremy Copeland  
Courtney Morris  
Kacey Walker