

Mathcamp 2019 Week 5 Schedule

Time	Room	Tuesday	Wednesday	Thursday	Friday
7:30–9:00	Fields Dining Hall	Breakfast			
9:10–10:00	JR Howard 123	Assembly (Council Chamber)	Packing Permutation Patterns 🌀 (Misha)	Young Tableaux and Probability 🌀 (Shiyue and Andrew)	
	JR Howard 132		[A] Farey Tales 🌀 (J-Lo)		
	JR Howard 135		Electrifying Random Trees 🌀 (Will)	The Polish Attack on the Enigma 🌀 (Ben)	
	Olin 204		Galois Theory Crash Course 🌀🌀 (Mark)		
10:10–11:00	JR Howard 123	[A] Conway–Coxeter Frieze Patterns 🌀 (Véronique)		Morse Theory 🌀 (Kayla)	
	JR Howard 132	Calculus without Calculus 🌀 (Tim!)		A Proof of the Sensitivity Conjecture 🌀 (Tim!)	
	JR Howard 135	The Class Number 🌀 (Gabrielle)		[A] Factoring in the Chicken McNugget Monoid 🌀 (Gabrielle)	
	Olin 204	The Riemann Zeta Function 🌀 (Mark)		Elegant Applications of Linear Algebra to Combinatorics 🌀 (Bill)	
11:10–12:00	JR Howard 123	Infinitely Many Proofs/Primes 🌀 (Eric)	The Mathematical ABC's 🌀 (Susan)	Matroids and Greed 🌀 (Will)	Finite-Ness 🌀🌀 (Susan)
	JR Howard 132	A Very Difficult Definite Integral 🌀🌀 (Kevin)	The Cauchy–Davenport Theorem 🌀 (Bill)	Rescuing Divergent Series 🌀 (Mark)	Perfect Numbers 🌀 (Mark)
	JR Howard 135	Traffic 🌀 (Assaf)	Pennsylvania's Gerrymandering Lawsuit 🌀 (Mira)	Calculus on Young's Lattice 🌀 (Kevin)	Why the Millennium Problems? 🌀 (J-Lo)
	Olin 204	Perspectives on Cohomology 🌀 (Apurva)	Perspectives on Cohomology 🌀🌀 (Assaf)	Perspectives on Cohomology 🌀 (J-Lo)	Perspectives on Cohomology 🌀 (Eric)
11:30–1:00	Fields Dining Hall	Lunch			
1:10–2:00	JR Howard 123	[A, HR] PARTIAL DIFFERENTIAL EQUATIONS 🌀🌀🌀 (Ben and Assaf)			
	JR Howard 132	Crossing Numbers, from 1954 to 2012 🌀 (Marisa)		Going in Cycles 🌀 (Misha)	
	JR Howard 135	All Things Manifolds 🌀 (Apurva)			
	Olin 204	Generating-Function Magic 🌀 (Bill)		You Can't Solve the Quintic 🌀 (Eric)	
2:10–3:00	JR Howard 123	Permutation Patterns (continues at 9AM)	Martin's Axiom 🌀🌀 (Susan)		
	JR Howard 132	Farey Tales (continues at 9AM)	Sporadic Groups and Where to Find Them 🌀 (Theo Johnson-Freyd)		
	JR Howard 135	Random Trees (continues at 9AM)	Markov Triples and Continued Fractions 🌀 (Véronique and Kayla)		
	Olin 204	Galois Theory (continues at 9AM)	Two Games and a Code 🌀 (Mira)		Procrastination 🌀 (Rice)
3:00–4:00	Fields Dining Hall	TAU – PI (TAU: Partial Interval)			
4:00–5:00	Olin 301	Exceptional Mathematics (<i>Theo Johnson-Freyd</i>)	Future of You	Extra PI (in the dorms 3:00–5:00)	Project Fair (in Smith Hall)
5:00–6:30	Fields Dining Hall	Dinner			

Key: [HR]—Homework Required [A]—Active learning