

[REVISED] Mathcamp 2022 Week 5 Schedule

Time	Room	Tuesday	Wednesday	Thursday	Friday
7:00–9:00	Dana	Breakfast			
9:10–10:00	Keyes 105	Assembly (Page Commons)	The Riemann zeta function 🍴 (Mark)		
	Lovejoy 205		Tracking pants 🍴🍴 (Arya)		
	Lovejoy 215		[HR] The word problem for groups 🍴 (Assaf)		
	Olin 01		Frequentist statistics 🍴 (Misha)	Bayesian statistics 🍴 (Ruthi Hortsch)	
10:10–11:00	Keyes 105	Thermodynamics and statistical mechanics 🍴 (Nic)			
	Lovejoy 119	Electric circuits and random walks 🍴 (Aaron)			
	Lovejoy 203	Universal algebra 🍴🍴 (Steve)			
	Olin 01	Counting with polynomials 🍴 (Alan Chang and Charloutte)			
11:10–12:00	Keyes 105	Multiplicative functions 🍴 (Mark)	Quadratic reciprocity 🍴 (Mark)		
	Lovejoy 205	Combinatorial reciprocity: counting through the looking-glass 🍴🍴 (Will Dana)	The Golay code 🍴 (Narmada)		
	Lovejoy 215	The Littlewood–Richardson rule 🍴🍴 (João)	Gibbard–Satterthwaite’s impossibility theorem 🍴 (Ben)	Greed 🍴 (Travis)	
	Olin 01	Getting your money’s worth from a 4-function calculator 🍴🍴 (Linus)	Spherical trigonometry with applications 🍴 (Mark Takken)	Sets that can tile lattices 🍴🍴 (Justin Lee)	
12:00–1:00	Dana	Lunch			
1:10–2:00	Keyes 105	The uncertainty principle 🍴 (Yuval)	Counting with linear algebra 🍴 (Travis)		Why June Huh won the Fields medal 🍴 (Yuval)
	Lovejoy 203	How to avoid taking APs: the blame game 🍴🍴 (Misha)	Sorry, it turns out SAT is hard after all 🍴 (Misha)		Extreme extremal graph theory 🍴 (Mia)
	Lovejoy 205	Graph algorithms 🍴 (Natali)	Reading Leibniz’s notes in Latin 🍴 (Assaf)	How to juggle 🍴 (Viv)	Lattices and invariant theory 🍴 (Rawin Hidalgo)
	Olin 01	The multiplication table problem 🍴 (Viv)	The sound of proof 🍴 (Eric)	Evil floating point bit level hacking 🍴 (Eric)	Problem solving: quick and quirky questions 🍴 (Misha)
2:10–3:00	Keyes 105	The axiom of choice 🍴 (Narmada)		The combinatorial Nullstellensatz 🍴🍴 (Yuval)	
	Lovejoy 205	Superpatterns 🍴 (Zack)		Overly convoluted drawings 🍴 (Ben)	
	Lovejoy 215	Primes in the Eisenstein integers 🍴 (Emily)		Block designs 🍴 (Emily)	
	Olin 01	Elo ratings 🍴 (Zoe)		Partially Ordered Galois Group Equivalence Relations 🍴 (Eric and Zoe)	
3:00–4:00	Lovejoy Lobby	TAU–PI (Time Academic Unscheduled: Partial Interval)			
4:10–5:00	Keyes 105	The square root of a NOT gate (Linus) (Blurb: Quantum probability is weird.)	Future of You (Staff)	Extra TAU for Project Fair prep (Everyone)	Project Fair (Lovejoy)
5:00–8:00	Dana	Dinner			

Key: [HR]—Homework Required