

Mathcamp 2020 Four-Week Schedule

Time	Week 1	Week 2		Week 3		Week 4
9 am	An inquiry-based approach to group theory 🐾🐾 (Katharine)	Combinatorics of tableaux 🐾🐾🐾 (Emily & Kayla)		Bairely complete 🐾🐾 (Ben)		Prime C numbers 🐾🐾🐾 (Emily)
	Cut that out! 🐾 (Zach Abel)	Graphs on surfaces 🐾 (Marisa)		Congruences of Bernoulli numbers and zeta values 🐾🐾🐾 (Eric)		Complexity theory 🐾 → 🐾🐾 (Linus)
	Determinantal formulas 🐾 (Kayla)	Introduction to number theory 🐾🐾 (Mark)		Geometric programming 🐾 (Misha)		The John Conway hour (week 2 of 2) 🐾 → 🐾🐾 (Mira & Misha)
	Introduction to graph theory 🐾🐾 (Misha)	Markov chains and random walks 🐾🐾 (Misha)		Spectral graph theory 🐾🐾 (Ania)		Takeya 🐾 (Alan)
	Teaching math to computers 🐾🐾 (Apurva)	Oh the sequences you'll know 🐾 (Zach Abel)		Regular expressions and generating functions 🐾 (Linus)		Uncertainty principle 🐾🐾🐾 (Neeraja)
10 am	Cubic curves 🐾🐾 (Mark)	Clopen for business: an inquiry-based approach to point-set topology 🐾🐾 (Katharine)		Extremal set theory: intersecting families 🐾 (Neeraja)		Brooks' theorem blues 🐾🐾 (Misha)
	Hyperplane arrangements 🐾 (Emily)	Conflict-free graph coloring 🐾 (Pesto)		Fourier analysis 🐾 (Alan)		How not to prove the Continuum Hypothesis (week 2 of 2) 🐾🐾🐾 (Susan)
	Integration on manifolds 🐾🐾🐾 (Neeraja)	Quantum mechanics 🐾🐾 (Andrew Guo)		FUNDamental groups and friends: an introduction to topological invariants 🐾🐾 (Katharine)		Representation theory of finite groups (week 2 of 2) 🐾🐾🐾 (Mark)
	Introduction to linear algebra 🐾 (Linus)	Ramanujan graphs, quaternions, and number theory 🐾🐾🐾 (Dan Galotta)		How not to prove the Continuum Hypothesis (week 1 of 2) 🐾🐾🐾 (Susan)		So you like them triangles? 🐾 (Dennis)
	The bell curve 🐾🐾 (Mira)	Weierstrass approximation 🐾 (Neeraja)	Hilbert's space-filling curve 🐾 (Ben)	Representation theory of finite groups (week 1 of 2) 🐾🐾🐾 (Mark)		Solving equations with origami 🐾 (Eric)
Noon	Don't worry, these cats don't bite! (Basic category theory) 🐾 (Dennis)	A Rubik's cube-based approach to group theory 🐾 (Alan & Dennis)		Classifying complex semisimple Lie algebras 🐾🐾🐾 (Kayla)		Combinatorial game theory 🐾 (Tim!)
	Fourier something something boolean functions 🐾🐾 (Tim!)	Cantor, Fourier, and the first uncountable ordinal 🐾🐾🐾 (Ben)		Geometry of lattices 🐾🐾 (J-Lo)		Connections to category theory 🐾🐾🐾 (Katharine)
	Introduction to analysis 🐾 (Alan)	Introduction to ring theory 🐾🐾 (Eric)		Grammatical group generation 🐾 (Eric)	Let's reverse-engineer photoshop 🐾 (Olivia Walch)	Extremal graph theory 🐾🐾 (Mia)
	Majorizing-Comparisons Solving of Problems 🐾🐾🐾 (Pesto)	Modeling computation 🐾 (Mia)		Information theory 🐾🐾 (Mira)		Fair squares (mod p) 🐾 (Maya)
	Mathcamp crash course 🐾 (Susan)	Wallis and his product 🐾 → 🐾🐾🐾 (Jon Tannenhauser)	The Plünnecke–Ruzsa inequality 🐾🐾 (Milan)	The John Conway hour (week 1 of 2) 🐾 → 🐾 (Pesto & Tim!)		Functions you can't integrate 🐾🐾 (Ben)