

# Mathcamp 2018 Tentative Four-Week Schedule

Time	Week 1	Week 2	Week 3	Week 4
9:10	Algebraic Number Theory  (Shiyue & J-Lo)	Cutting paper stuff  (Steve Schweber)	History of Math  (Sam)	ARML Power Rounds  (Misha)
	Crash Course  (Lara)	de Bruijn Sequences  (Pesto) Random Matchings  (Fedyo Manin)	Linear Programming  (Linus)	Differential Topology  (Kevin)
	Statistical Modeling  (Sam)	Haskell  (Larsen)	Partially Ordered Sets  (Mike Orrison)	Public-Key Cryptography  $\rightarrow$  (J-Lo)
	Street Fighting Mathematics  (Sanjoy Mahajan)	Potato  (Apurva)	Signals Analysis  (Jeff)	Representation Theory (2/2)  $\rightarrow$  (Aaron)
	Symmetries & Polynomials  (Aaron & Apurva)	Intro Ring Theory  (Lara)	Trees!  (Shiyue)	The Erdos Distance Problem  $\rightarrow$  (Ben)
10:10	bigg Numbers  (Linus & Pesto)	Flag Algebras  $\rightarrow$  (Misha)	Axiomatic Music Theory  (J-Lo)	Investigating Groups  $\rightarrow$  (Sara)
	Complex Dynamics  (Scott Kaschner)	Hardness  (Linus)	Commutative Algebra (1/2)  (Mark)	Mathematical Art History  (Viv)
	Infinitesimal Calculus  (Tim!)	Intersecting Curves  (J-Lo)	Monsters in Real Analysis  (Ben)	Mathematics of Democracy  (Mira)
	Linear Algebra (1/2)  $\rightarrow$  (Mark)	Linear Algebra (2/2)  (Mark)	Low-Dimensional Zoology  (Larsen)	The Fundamental Group  (Larsen)
	Machine Geometry  (Misha)	MCMC  (Mira)	The Continuum Hypothesis (1/2)  $\rightarrow$  (Susan)	Trail Mix  $\rightarrow$  (Mark)
11:10	Calculus on Graphs  (J-Lo)	Intro Number Theory (2/2)  (Mark)	Axiomatic Geometry  (Misha)	Algebraic Geometry (2/2)  (Mark)
	DIY Hyperbolic Geometry  (Katie Mann)	Metric Space Topology  (Jeff)	Conflict-Free Graph Coloring  (Pesto)	Machine Learning  (Linus)
	Game Theory  (Ben)	PS: Inequalities  (Pesto)	Oversize Airline Baggage  (Tim!) David R's Math Class  $\rightarrow$  (David Roe)	Martingales  (Yuval)
	Group Theory  (Mira)	The Class Number  (Kevin)	Representation Theory (1/2)  (Aaron)	Simple Models of Computation  (Pesto)
	Stupid Games on Uncountable Sets  (Susan)	Topological Tverberg's theorem  (Viv)	Riemann's Explicit Formula  (Kevin)	The Continuum Hypothesis (2/2)  $\rightarrow$  (Susan)
1:10	How to Integrate Better  (Steve Schweber)	Modular Forms  (Shiyue)	Combinatorics of some sort  (Mark)	Mathematical Promenade  (Tim!) Combinatorial Designs  (Ania)
	Intro Graph Theory  (Mia)	Chaotic? Good!  (Ben)	Divisor Theory of Graphs  (David Perkinson)	Cohomology via Sheaves  $\rightarrow$  (Apurva)
	Intro Number Theory (1/2)  (Mark)	Combinatorial Poetry  (Matt Stamps)	Galois Theory  (Viv)	Modeling of Biological Systems  $\rightarrow$  (Angela & Kamila)
	Probability & Paradoxes  (Larsen)	Guess Who?  (Tim!)	Max Flow Min Cut  (Tim!)	Ramsey Theory  (Misha)
	Triangulations and Flip-Graphs  (Viv)	The outer automorphism of $S_6$  (Aaron)	Spectral Graph Theory  (Laura) $q$ -Analogues  (Maria Gillespie)	Rational Points on Elliptic Curves  (Shiyue)