	Week 1	Week 2	Week 3	Week 4
09:10	**(ANA)** Multivariable Calculus Crash Course Mark, 🌶🌶🌶	**(COM)** Intro Graph Theory *Mira Bernstein,* 🌶🌶	**(ANA)** Magic of Harmonic Functions *Alan Chang* and Laithy, 🌶🌶🌶🌶	**(VAR)** A Tour of Paradox Riley S, 🌶
	(NT) Algorithms in NT Misha, 🌶🌶	**(ALG/GEO)** Geometric Group Theory (week 1 of 2) Arya, 🌶🌶	**(ANA)** Calculus without limits Glenn, 🌶, T-F **(APL)** Slide Rules Glenn, 🌶, S	**(LOG)** Mathematical Logic, or How We Know We're Not Wasting Our Time (Completely) Maya, 🌶🌶🌶
	(ANA/NT) The other other analytic NT (week 1 of 2) (modular forms) *Dave Savitt,* 🌶🌶🌶🌶	**(TOP)** Kowalsky's Hedgehog Theorem *Ben Dees,* 🌶🌶🌶	**(LOG)** Model Theory *Aaron Anderson,* 🌶🌶🌶	**(APL)** Einstein's theory of gravity 2: General relativity Laithy, 🌶🌶🌶🌶
	(GEO) Differential Geometry of Surfaces Laithy, 🌶🌶🌶	**(ALG)** Intro ring theory Mark, 🌶🌶🌶	**(ALG)** Oops all algebra: An Introduction to Infinity Categories Riley S, 🌶🌶🌶🌶	**(VAR)** 5 proofs that it is impossible to tile a 10x10 square by 1x4 rectangles Nikita, 🌶🌶
	(VAR) On beyond i Steve, 🌶	**(ANA)** Hilbert Spaces (over C) - What does 1 1/2 linear mean and why is it so helpful? Audrey, 🌶🌶🌶	**(NT)** Diophantine approximation and transcendental number theory *Sarah Peluse,* 🌶🌶, T-F **(NT)** Diophantine Approximations and the Putnam Misha, 🌶🌶, S	**(ALG)** Representation Theory of Finite Groups (week 2 of 2) Mark, 🌶🌶🌶🌶
BREAK				
10:10	**(ALG)** Intro Linear Algebra Narmada, 🌶🌶	**(VAR)** Triangles in a square: how hard can it be? 🤔 Glenn, 🌶🌶	**(LOG)** Computing past infinity Della, 🌶🌶🌶	**(VAR)** History of math *Neeraja Kulkarni,* 🌶
	(NT) The Number Theory of Quadratic Forms *Nic Ford,* 🌶🌶🌶	**(ANA)** Badly behaved Sets Sam, 🌶🌶	**(ANA)** Functions of a Complex Variable (week 2 of 2) Mark, 🌶🌶🌶	**(CS)** Smhtiroglalgorithms Zach, 🌶🌶🌶
	(ALG) Finite Field Trip Eric, 🌶🌶	**(LOG)** Introduction to Descriptive Set Theory Maya, 🌶🌶🌶🌶	**(ALG)** Orthogonal Projections Riley W, 🌶	**(VAR)** Trail Mix Mark, variable 🌶
	(CS) Elements of a Classical Chess Engine Riley W, 🌶🌶	**(ALG)** Singular Value Decomposition Kaia, 🌶🌶🌶	**(COM/GEO)** Hales-Jewett Theorem Misha, 🌶🌶🌶🌶	**(LOG/COM)** Combinatorics with ultrafilters Steve, 🌶🌶🌶🌶
	(TOP/ANA) Counterexamples to the Fundamental Theorem of Calculus *Ben Dees,* 🌶🌶🌶🌶	**(GEO/COM)** Finite Geometries Misha, 🌶	**(GEO)** Cut that Out! Zach, 🌶🌶	**(GEO)** Hyperbolic Geometry *Dan Zaharopol,* 🌶🌶
BREAK				
11:10	**(ALG)** Intro Group Theory *Mira Bernstein,* 🌶🌶🌶	**(COM/NT)** Arithmetical Structures on Graphs *Joel Louwsma,* 🌶🌶	**(ALG)** Representation Theory of Finite Groups (week 1 of 2) Mark, 🌶🌶🌶🌶	**(GEO/TOP)** Flat Surfaces *Jenya Sapir,* 🌶🌶
	(APL) Conjugate Gradient Kaia, 🌶🌶	**(COM)** The Polynomial Method in Combinatorics Charlotte and Narmada, 🌶	**(NT)** Dirichlet class number formula *Viv Kuperberg,* 🌶🌶🌶🌶	**(ANA/NT)** The other analytic number theory (p-adics) Eric, 🌶🌶🌶
	(COM) Generating Functions, Catalan Numbers and Partitions Mark, 🌶🌶	**(ALG/CS)** Homomorphic encryption Eric, 🌶🌶	**(APL)** QR Factorization Kaia, 🌶🌶🌶	**(ANA)** Differentiating the Undifferentiable Sam, 🌶🌶🌶🌶
	(TOP) Extra-Stretchy Rubber Sheet Geometry Riley S, 🌶	**(LOG)** Breaking the axiom of choice Steve, 🌶🌶🌶🌶	**(ALG/GEO)** Geometric Group Theory (week 2 of 2) Arya, 🌶🌶	**(COM)** Combinatorial Game Theory *Laura Pierson,* 🌶🌶, T-W **(CS/NT)** Error-correcting codes Narmada, 🌶🌶, Th-S
	(COM) Percolation Nikita, 🌶🌶🌶🌶	**(ANA)** Functions of a Complex Variable (week 1 of 2) Mark, 🌶🌶🌶	**(COM)** Hat puzzles Nikita, 🌶🌶	**(COM)** Two cool techniques related to exact cover problems Riley W, 🌶🌶🌶
BREAK				
13:10	**(ANA)** The Real Numbers Maya, 🌶, T-Th *(tbd)* *Po-Shen Loh, F-S*	**(ALG)** Category theory from scratch Della and Riley S, 🌶🌶🌶	**(APL)** Einstein's theory of gravity 1: Special relativity Laithy, 🌶🌶	**(CS)** How to solve an NP-complete Problem Glenn, 🌶🌶🌶
	(VAR) Crash course Glenn, 🌶, 80 mins	**(VAR)** Problem-Solving: Induction Zach, 🌶, 80 mins	**(GEO)** Problem-Solving: Cheating in Geometry *Zack Chroman*, 🌶🌶🌶, 80 mins	**(APL)** Seasonal Infectious Disease Models Kaia, 🌶🌶
	(LOG) Stupid games on infinite graphs Della, 🌶🌶, 80 mins	**(COM)** Catalan Structures Riley W, 🌶🌶	**(ANA)** Reverse Flash: Fractal Geometry Narmada, 🌶🌶🌶🌶, 80 mins	**(VAR)** Math for solving puzzles Della, variable 🌶, 80 mins
	(TOP) Intro to Point-set topology Audrey, 🌶🌶🌶	**(GEO)** The shape and soul of a surface: the Gauss Bonnet theorem Laithy, 🌶🌶🌶, T-Th **(CS)** Solving sudokus fractionally: linear programming Nikita, 🌶🌶, F-S	**(LOG/COM)** Infinite Trees (week 1 of 2) Susan, 🌶🌶🌶	**(LOG/COM)** Infinite Trees (week 2 of 2) Susan, 🌶🌶🌶
	(ANA) The Not So Ordinary Theory of Ordinary Differential Equations Sam, 🌶🌶🌶	**(ANA/NT)** The other other analytic NT (week 2 of 2) (modular forms) *Dave Savitt,* 🌶🌶🌶🌶	**(ANA/COM)** Additive Combinatorics & Fourier Analysis Charlotte, 🌶🌶	**(ANA)** Continuous Functional Calculus on Hilbert Spaces (over C): We can take the square root of a function now?! Audrey, 🌶🌶🌶🌶
Topics -	Algebra **(ALG)** / Analysis **(ANA)** / Applied Math **(APL)**	Comp. Sci. **(CS)** / Combi. **(COM)** / Geometry **(GEO)**	Logic **(LOG)** / NT **(NT)** / Topology **(TOP)**	Variety **(VAR)**