

## MATH 413/813 MINI-CONFERENCE, PART I

TUESDAY, APRIL 16, 2019, JEFF 422

Time	Speaker	Title
9:30–10:00	Paul Wilson	Gröbner Bases
10:00–10:30	Ilia Korchagin	Grassmannians
10:30–11:00	Jason Kattan	Koszul Complexes
11:00–11:30	Break	
11:30–12:00	Nour Mustafa-Famy	Noether Normalization
12:00–12:30	Erin Crawley	The Quillen-Suslin Theorem
12:30–13:30	Lunch (Room 202)	
13:30–14:00	Gage Thornewell	Combinatorial Nullstellensatz
14:00–14:30	Nicole Pereira	Alexander Duality
14:30–15:00	Break	
15:00–15:30	Sonja Ruzic	Tropical Varieties
15:30–16:00	Ankai Liu	Linear PDEs

### NOTES:

- (1) Jeff 422 has a data projector, overhead projector, and chalkboard. You are welcome to use any combination of these in your presentation. I will bring the department laptop which can display pdf files and run powerpoint but which is also a bit slow. You may want to bring your own computer or arrange with a friend in the class to have a computer in common.
- (2) The presentations should be 20 minutes long. The talks are scheduled in 30 minute blocks for the reasons that : (a) sometimes talks go over; (b) there should be time for some questions; and (c) it too much to go from one talk immediately to the next with no pause in between — this is not a relay race!
- (3) Although it might seem slightly scary to be giving a presentation, you shouldn't be too worried: you are among friends, and all of them will be presenting too. In any case, you have spent some time understanding the topic, and as a result you are the local expert, and know more about this topic than anyone else. We will all learn something from your presentation, and the end of the day will have seen quite a lot of new mathematics.
- (4) Lunch and snacks (of varying quality) will be provided.

## MATH 413/813 MINI-CONFERENCE, PART II

THURSDAY, APRIL 25, 2019, JEFF 319

Time	Speaker	Title
9:30–10:00	Keenan McPhail	Belyi's Theorem
10:00–10:30	Chelsea Crocker	Elliptic Curve Cryptography
10:30–11:00	Daniel Cloutier	Quotients by Finite Groups
11:00–11:30	Break	
11:30–12:00	Katrina Parsche	Stickelberger's Theorem
12:00–12:30	Sean Monahan	Sums of Squares
12:30–13:30	Lunch (Room 202)	
13:30–14:00	Samuel DeCoste	Resultants
14:00–14:30	Landon McDougall	Bezout's Theorem
14:30–15:00	Break	
15:00–15:30	Didi Zhang	Hilbert's Syzygy Theorem
15:30–16:00	YoonSung Oh	Integer Programming

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