

MATH 595 TOPICS COURSE: ALGEBRAIC COMBINATORICS

Instructor: Alexander Yong

Place and time: 445 ALTGELD HALL; TR 2:00pm-3:20pm

This course will be an introduction to research in algebraic combinatorics. I will discuss some archetypes of problems and directions of research in the field. The topics of the lectures will be:

- (1) Bijections
- (2) (Symmetric) polynomials
- (3) Positivity
- (4) Degeneration
- (5) Use of computers
- (6) Who does what and why?

Only part of this class will consist of traditional lectures. The remainder will be a combination of in class activities and guest presentations (internal and external). The main objective will be to provide the student with an active and working knowledge of the field and its culture.