Minicourse
Introduction to Intersection Theory

Spring 2020

Course description: We will study the intersection theory of the zero loci of polynomials, or schemes.

References:

- *3264 & All That: Intersection Theory in Algebraic Geometry* by D. Eisenbud and J. Harris.
- *Intersection Theory* by W. Fulton.
- $\mathbb{A}^1$*-Algebraic Topology over a Field* by F. Morel.

Updated *Time and place:* Tuesday 10-11:15am Physics 227. Thursday 1:25-2:40am Physics 205. Webpage through link at `https://services.math.duke.edu/~kgw/`.

Instructor contact information: Kirsten Graham Wickelgren,

e-mail: kirsten.wickelgren@duke.edu,

office: Physics and Math: room 025

office hours: after class and by appointment.

Prerequisites: Intersection theory is often described as a second course in algebraic geometry.

Topics:

- (oriented) Chow groups

- Intersection product
- Characteristic classes

Assignments: No assignments

Duke University's Community Standard is available at: `https://studentaffairs.duke.edu/conduct/about-us/duke-community-standard`