Math 581A–Linear Algebraic Groups

Fall 2023

PDL C-38 MWF 9:30

Instructor: Monty (or William) McGovern, PDL C-450, mcgovern@math.washington.edu

Office Hours: drop in, or by appointment.

Website: Lecture notes posted on Canvas (see Files or Modules); HW also posted there (see Assignments)

Text: Linear Algebraic Groups by T. A. Springer, 2d ed., Birkhhäuser, Boston, 1998.

Prerequisite: Math 506 or instructor permission.

What to Expect: This is a one-quarter course on linear algebraic groups, that is, groups having the structure of an affine algebraic variety over an algebraically closed field. (The text also treats algebraic groups over arbitrary fields, but I will restrict to the algebraically closed case.) The material will overlap to some extent with that of Math 567 (Algebraic Geometry) but will have substantial differences with the latter as well. Homework will be collected every other Friday.