Math 507A–Complex Semisimple Lie Algebras

Fall 2020

MWF 9:30

http://zoom.us/j/9138184583; meeting passcodes TBA

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

Office Hours: F after class; meeting id above.

Website: http://www.math.washington.edu/~mcgovern/507.html (HW),and
http://www.math.washington.edu/~mcgovern/507au20 (lecture notes)

Text: *Introduction to Lie Algebras and Representation Theory* by James Humphreys (Springer, 1972), 3d printing, 1980.

Prerequisite: Math 506 or instructor permission.

What to Expect: This is the first quarter of the Algebraic Structures sequence. I will classify complex semisimple Lie algebras, also proving structural results about general Lie algebras along the way. Although one usually first encounters Lie algebras in a manifolds course, this treatment (following the text) will be entirely algebraic. Homework will be collected every other week on Friday.