

Math 508A–Complex Semisimple Lie Algebras

Winter 2019

MWF 10:30 PDL C-401

Instructor: Monty (or William) McGovern, C-450 Padelford, phone 543-1149, email mcgovern@math.washington.edu.

Office Hours: drop in, or by appointment.

Website: <http://www.math.washington.edu/~mcgovern/508.html> and
<http://www.math.washington.edu/~mcgovern/508wi19> (lecture notes)

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

Prerequisite: Math 506 or instructor permission.

What to Expect: This is the second 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.