Physics 220, Week 2 topics

($\star$ = slightly more important.)

• More on representations.

• Examples of 1d and 2d S_3 representations.

$\star$ The "regular" representation for any group.

$\star$ Reducible, completely reducible, and irreducible representations.

• Finite groups: all reps equivalent to unitary ones, all reps either irreducible or completely reducible.

$\star$ Schur's lemmas. Applications in quantum mechanics.