

## Rep Thy I: Problem Set 4 (due Fri Oct 12)

- Exercises 5.4 (from Sec 5.7), 6.1, 6.2, 6.3, 6.4, 6.5 from Serre
- **Problem A:** Consider the 5 irreducible characters of  $S_4$  as labeled in Section 5.8. Decompose the following into irreducible characters:
  - (i)  $\text{Sym}^2(\theta)$
  - (ii)  $\psi \otimes (\varepsilon\psi)$

### Presentations

RR (5.4 from Sec 5.7), SW (6.1), JD (6.3), DG (6.4), EH (Prob A)