

Week 48: Coupled cluster theory and summary of course

Morten Hjorth-Jensen¹

Department of Physics and Center for Computing in Science Education,
University of Oslo, Norway¹

Week 48, November 25-29

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1. Thursday:

- 1.1 Short repetition from last week
- 1.2 How to write your own coupled-cluster theory code, pairing model example
- 1.3 Coupled cluster theory, singles and doubles excitations, diagrammatic expansion

2. Friday:

- 2.1 Coupled cluster theory for singles and doubles excitations using a diagrammatic derivation
- 2.2 Summary of course and discussion of final oral exam

3. Lecture material: Lecture notes and Shavitt and Bartlett chapters 9 and 10. See also slides at

<https://github.com/ManyBodyPhysics/FYS4480/blob/master/doc/pub/week48/pdf/cc.pdf>