

## 6 Exercises lectures 13-14 (due March 19th)

### 6.1 Trial moves and ensembles in MC

Solve questions 12 and 13 on pages 135 and 136 of Frenkel and Smit.

### 6.2 Variational QMC

- a) Derive equation (12.13) on page 378 of Thijssen. Thijssen does not mention it, but you should neglect  $dE_L/d\alpha$ .
- b) Do exercise 12.5 a, b, and e on page 420 of Thijssen.

### 6.3 Path integral QMC

Do exercise 12.2 on pages 418 and 419 of Thijssen.