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## Session 8

Given the Ising model in 1 dimension

$$H = -h \sum_i s_i - J \sum_i s_i s_{i+1}$$

write the recursion relations for the interaction parameters when coarse-graining the "odd" sites and preserving the "even" ones.

Show that there is no proliferation of the interactions.

For the case  $h=0$  find the solution of the renormalisation map.

- Discuss the solution for the "field" parameter
- Discuss the stability of the fixed points.