

List of subjects/ideas for the final presentation

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Proposals

- 1 Power law distributions.
- 2 Dynamical models of criticality: forest fires.
- 3 Qiskit circuit: relaxation and coherence time.
- 4 Quantum Monte Carlo: transversal field Ising model.
- 5 Quantum Monte Carlo: bosons (Krauth Les Houches Notes).
- 6 Adiabatic quantum computer: entropy entanglement.
- 7 Adiabatic quantum computer: large N scaling.
- 8 Adiabatic quantum computer: the connection with quantum circuits.
- 9 Single neuron learning exercise. (McKay Book Chap. 39).
- 10 Continuous Hopfield network and mean-field equations. (McKay Book Chap. 42.3, 42.4 and 33.1, 33.2, 33.3).

Proposals: remarks

I can provide extra references or guidance for all the proposals.