Final projects

The project report (10 pages) must be delivered up to 2 days before its discussion, on December 11th, which includes an oral presentation (15 min) and its discussion (15 min).

List of projects:

1. SOC (application of your own choice) Textbook or book by P. Bak
2. RG in momentum space (epsilon expansion) Notes by M. Fisher and good books on SM
3. Lifshitz points (Landau theory) Notes Lifshitz and good books on SM – João Sena
4. Correlation function and correlation length in the Gaussian model (Landau theory) Notes Gaussian and good books on SM - José Carmelo
5. Correlated percolation (Phys. Rev. E 88, 052102 (2013)) - Lucas Silva
6. Explosive percolation – Ana Ribeiro
7. SOC rain fall – Timothee Belime
8. SOC earthquakes – Helder Esteves
9. SOC forest fires – Santiago Costa
10. SOC neural nets – João Silva
11. SOC bulk metallic glasses – Guilherme Amaral
12. Ising-Shelling and self-organized segregation – Loumi Gatouillat
13. Projects proposed by the students

It is required to make an explicit connection with the concepts discussed in the lectures.