

Code description:

The `computeAbsorptionTime` program calculates the absorption time t in a 2D periodic system of size L in subcritical and supercritical regimes.

To measure the evolution of the absorption time, the program varies the system size and performs N simulations, first in subcritical regime ($\rho = \rho_c - 0.05$), then in supercritical regime ($\rho = \rho_c + 0.005$).

For each configuration, N absorption times are thus calculated. The results are saved in the files `Lxx_subcritical.txt` and `Lxx_supercritical.txt` ('xx' corresponding to the system size).

Input parameters:

Parameter	Variable name	Data type
Save folder	<code>save_folder</code>	string
System size L	<code>L</code>	integer
Critical density ρ_c	<code>rho_c</code>	double
Number of simulations	<code>N</code>	integer

Post process:

The `post_process.py` script retrieves all the values from the files `Lxx_subcritical.txt` and `Lxx_supercritical.txt`. It then plots the median absorption time as a function of the system size.