

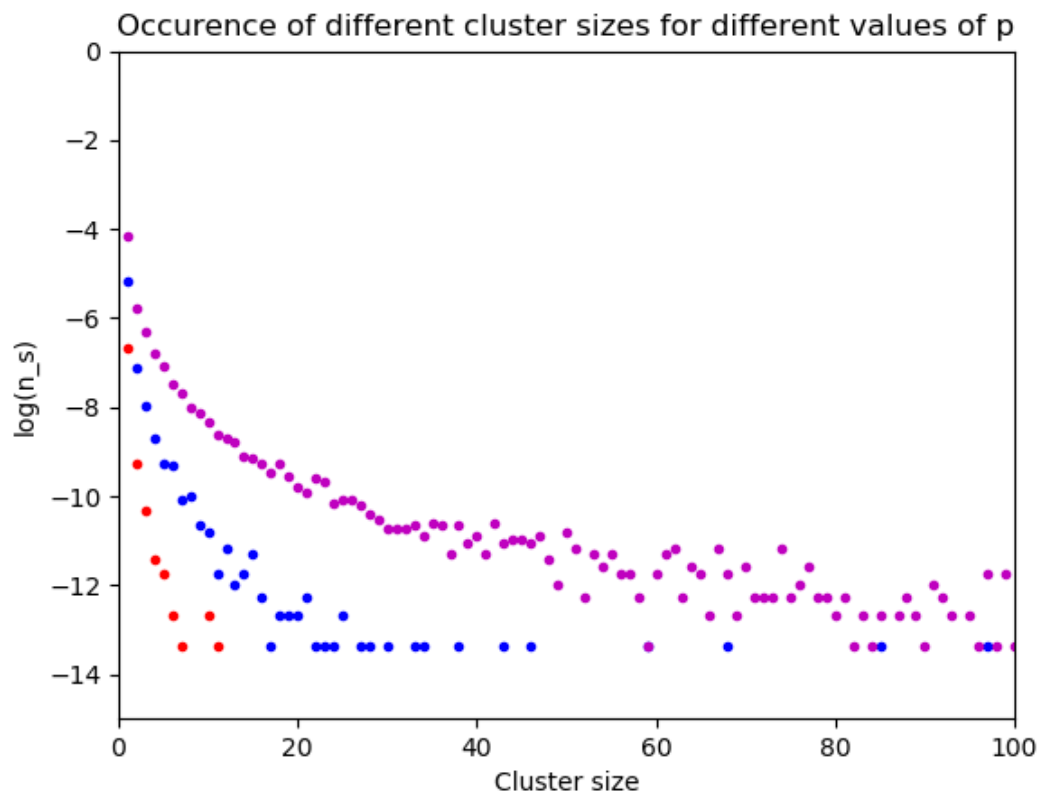
Red:  $p=0.1$

Blue:  $p=0.2$

Magenta:  $p=0.3$

Black:  $p=0.4$

The four sets of data were collected from four different simulations, each of them was performed considering a lattice of size  $L=1000 \times 1000$ .



Red:  $p=0.8$

Blue:  $p=0.7$

Magenta:  $p=0.6$

The three sets of data were collected from three different simulations, each of them was performed considering a lattice of size  $L=800 \times 800$ .

Confronting the two graphs one notices a particular behaviour of the curve. Starting from  $p=0$  the curve gets less and less steep until the value of  $p$  reaches some critical value (that seems reasonably to coincide with the threshold value  $p=0.592$ ) around  $p=0.6$ . Then, as  $p$  increases further, the curve gets steep again, and becomes similar to the curves one obtained for low values of  $p$ , but there is a difference. For  $p>0.6$  one expects percolation to happen and then to find a solitary large value of the cluster size in the graph.