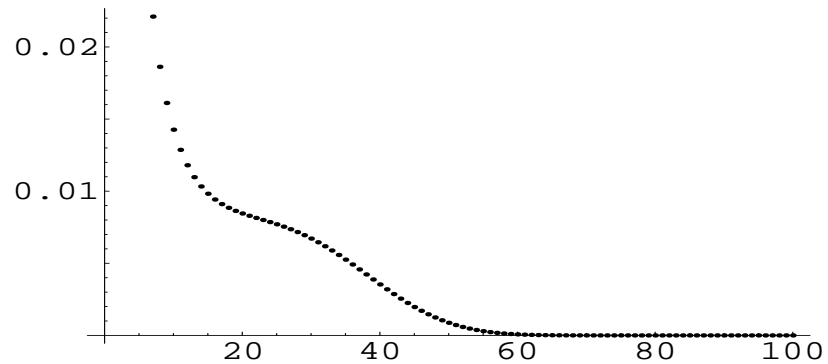


In bond percolation various correlation functions can be obtained from extrapolation of (rational) finite size results.

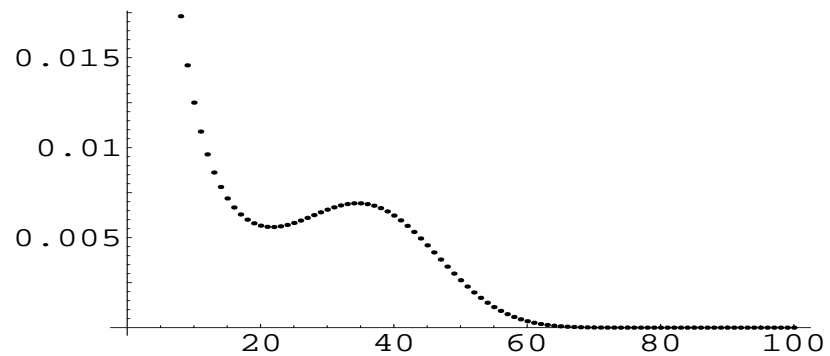
For example we could calculate exactly the probability that a cluster on a cylinder is cut in  $n$  places by a circle around the cylinder.

The numbers depend on the boundary condition (periodic or antiperiodic), and on the possible restriction to clusters that do or do not wind around the cylinder.

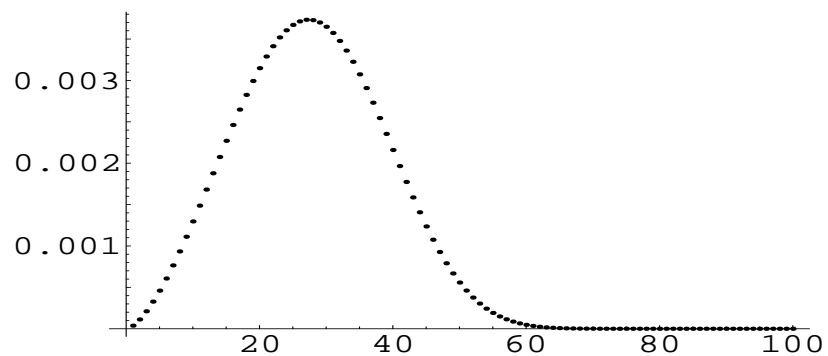
Graphs of these probabilities are plotted vs  $n$  on the next page.



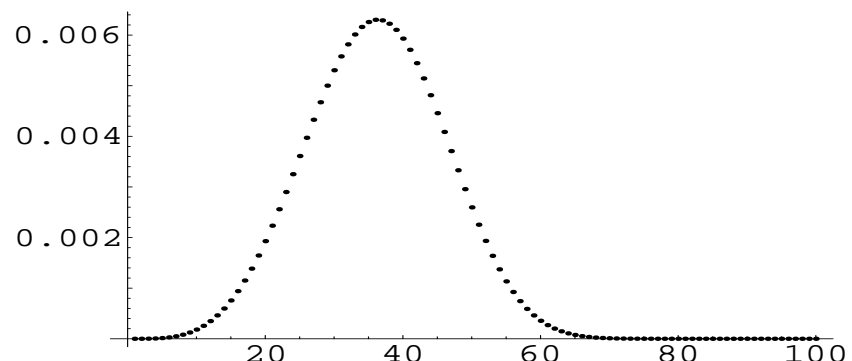
All clusters PBC



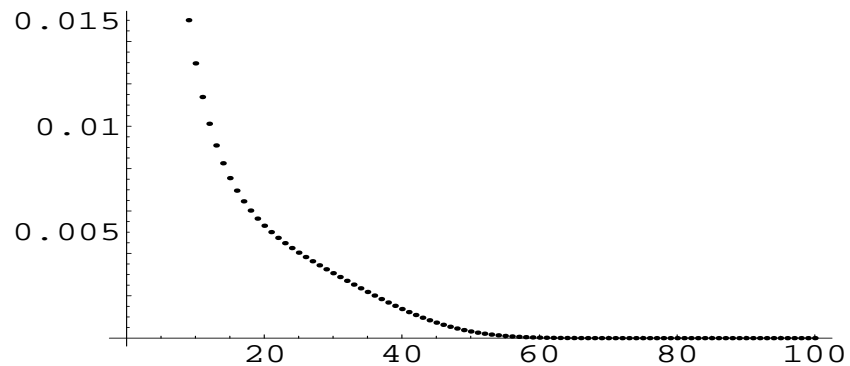
All clusters anti - PBC



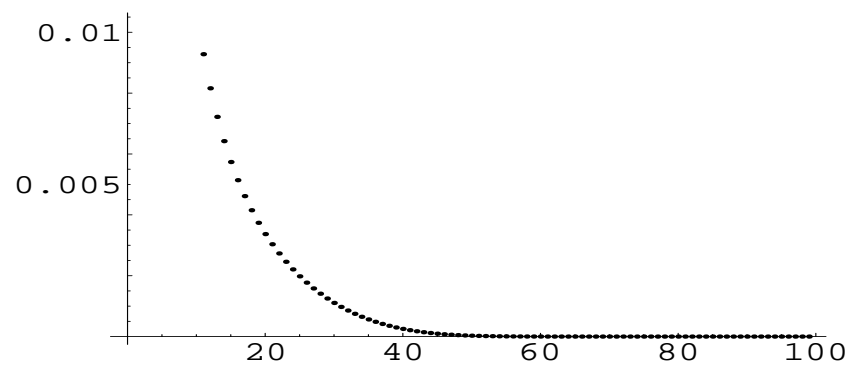
Only winding clusters PBC



Only winding clusters anti - PBC



Only non-winding clusters PBC



Only non-winding clusters anti - PBC