



MathsNET
A joined up approach to
teaching and learning
mathematics

Monte Carlo Simulation

- Explain why it is not possible to calculate the partition function exactly for many complex systems of interest?

- Give a formula that allows one to calculate the value of an ensemble average

- How is the ensemble average related to the expectation of a random variable

- State the law of large numbers and define all the symbols in this expression



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- Explain the metropolis sampling algorithm