

Correlations in the Ising Kagome Lattice

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Abstract : Using a previously developed procedure and with the aid of algebraic software, a two-dimensional generalized Ising model with a 4×2 unitary cell (UC), we obtain a Kagome Lattice with twelve different spin-spin values of interaction, in order to determine the partition function per spin $L(T)$. From the partition function we can study the magnetic behavior of the system. Because of the competition phenomenon between spins, a very complex behavior among them in a variety of magnetic states can be observed.

Keywords : correlations, Ising, Kagome, exact functions

Conference Title : ICNM 2014 : International Conference on Nanoscale Magnetism

Conference Location : Paris, France

Conference Dates : December 30-31, 2014