

## 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  $4 \times 2$  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

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