Abstract Submitted
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The magnetisation distribution of the Ising model for $d \geq 5$ PER LUNDOW, ANDERS ROSENGREN, KTH - Royal Institute of Technology — The magnetisation distribution of the Ising model for $d > 4$ is excellently fitted by a generalised binomial distribution. We have computed exactly an ansatz expression which can be fitted to the distribution near T_c. Though the ansatz is long and complicated it only has three parameters, besides the number of vertices, which then provides us with details about the distribution. This method also provided us with an estimate of T_c for $d = 6$. For extremely dense regular graphs, such as a complete bipartite graph, we can show what the parameter values are and that these values give asymptotically correct behaviour of eg the susceptibility and the free energy. Also a possible approach for $d \leq 4$ will be briefly discussed as well as boundary effects for $d = 5$.

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