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# Exact recovery in the Ising blockmodel

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We consider the problem associated to recovering the block structure of an Ising model given independent observations on the binary hypercube. This new model, called the Ising blockmodel, is a perturbation of the mean field approximation of the Ising model known as the Curie-Weiss model: the sites are partitioned into two blocks of equal size and the interaction between those of the same block is stronger than across blocks, to account for more order within each block. We study probabilistic, statistical and computational aspects of this model in the high-dimensional case when the number of sites may be much larger than the sample size.

*Joint work with Philippe Rigollet and Piyush Srivastava.*

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