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Title: On a Class of Simple Spin Glass Models

Abstract: In the 1980's B. Derrida introduced a class of spin class models, called Generalized Random Energy models, that are based on Gaussian processes on $\{-1, 1\}^N$ whose covariance is a function of the ultrametric lexicographic distance on $\{-1, 1\}^N$. It will be shown that all these models can be solved exactly in the sense that a complete description of the limiting random Gibbs measures can be obtained, including situations when the phase transition and the full replica symmetry breaking takes place.