

Hidetoshi Nishimori

Tokyo Institute of Technology

Analyses of non-stoquastic Hamiltonians by the mean-field theory

Non-stoquastic Hamiltonians cannot be easily simulated classically and are known to have the capacity to accelerate quantum annealing in some cases. I review our analyses of non-stoquastic Hamiltonians and present new results on the role of quantum effects in the mean-field-type non-stoquastic Hamiltonians.

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