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A generalization of valence-bond-Monte-Carlo to spin 1 magnets ANDREAS DESCHNER, ERIK S. SORENSEN, McMaster University — Valencebond-Monte-Carlo is an elegant and efficient projective Monte-Carlo method that has been employed to calculate ground-state properties of bipartite antiferromagnets. Until now it has only been used for spin 1/2 models. We propose a method that allows one to also treat spin 1 models with valence-bond-Monte-Carlo. The spin 1 Heisenberg antiferromagnet with nearest-neighbour-interaction is used as an example to explain the method and to show its usefulness for bipartite spin 1 models.

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