

Abstract Submitted
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The spin glass transition of the three dimensional Heisenberg spin glass.¹ SERGIO PEREZ-GAVIRO, Universidad de Zaragoza & BIFI, ISABEL CAMPOS, Universidad de Cantabria & BIFI, MARIA COTALLO-ABAN, Universidad de Zaragoza & BIFI, VICTOR MARTIN-MAYOR, Universidad Complutense de Madrid & BIFI, ALFONSO TARANCON, Universidad de Zaragoza & BIFI — We present our results[1] about the study of the critical properties of the three dimensions Edwards-Anderson model with Heisenberg spins, by means of Monte Carlo simulation and Finite Size Scaling analysis. A mixture of Heath Bath and Overrelaxation algorithms allowed us to thermalize lattices of size up to $L=32$. We have found a finite temperature transition where both the spin glass and the chiral glass orderings develop. The presence of logarithmic corrections suggests that the phase transition is of Kosterlitz-Thouless type, although we may not exclude a lower critical dimension barely smaller than three.

[1] I. Campos, M. Cotallo-Aban, V. Martin-Mayor, S. Perez-Gaviro and A. Tarancon, Phys. Rev. Lett. in press (cond-mat/0605327).

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