

Abstract Submitted  
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**Numerical Study of Magnetism in the Periodic Anderson Model<sup>1</sup>**

YONG-QIANG WANG, HAI-QING LIN, Institute of Theoretical Physics and Department of Physics, The Chinese University of Hong Kong, Hong Kong SAR, China, JAMES GUBERNATIS, Los Alamos National Laboratory, USA — The periodic Anderson model is believed as a candidate of the minimal lattice models for itinerant ferromagnetism. Several numerical methods, including exactly diagonalization, constrained-path Monte Carlo method and mean field method, are employed to investigate the magnetic properties of the model in one dimension and two dimensions. By changing the band-filling, chemical potential of the impurity band and the hybridization between conduction band and impurity band, we found that in some parameter regions, different magnetic ordering exist. Some of results confirm the previous works and some are new.

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