

Title: Reply to "Comment on 'Effect of polydispersity on the ordering transition of adsorbed self-assembled rigid rods' "

Author(s): Almarza, N. G.¹; Tavares, J. M.^{2,3}; Telo da Gama, M. M.^{2,4}

Source: Physical Review E

Volume: 85 **Issue:** 5 **Article Number:** 053102 **DOI:** 10.1103/PhysRevE.85.053102

Part: Part 1 **Published:** May 2 2012

Document Type: Editorial Material

Language: English

Abstract: We comment on the nature of the ordering transition of a model of equilibrium polydisperse rigid rods on the square lattice, which is reported by Lopez et al. to exhibit random percolation criticality in the canonical ensemble, in sharp contrast to (i) our results of Ising criticality for the same model in the grand canonical ensemble [Phys. Rev. E 82, 061117 (2010)] and (ii) the absence of exponent(s) renormalization for constrained systems with logarithmic specific-heat anomalies predicted on very general grounds by Fisher [Phys. Rev. 176, 257 (1968)].

KeyWords Plus: Critical Exponents

Reprint Address: Almarza, NG (reprint author), CSIC, Inst Quim Fis Rocasolano, Serrano 119, E-28006 Madrid, Spain.

Addresses:

1. CSIC, Inst Quim Fis Rocasolano, E-28006 Madrid, Spain
2. Univ Lisbon, Ctr Fis Teor & Computac, P-1649003 Lisbon, Portugal
3. Inst Super Engn Lisboa, P-1959007 Lisbon, Portugal
4. Univ Lisbon, Fac Ciências, Dept Fis, P-1749016 Lisbon, Portugal

Publisher: Amer Physical SOC

Publisher Address: One Physics Ellipse, College PK, MD 20740-3844 USA

ISSN: 1539-3755

Citation: Almarza N G, Tavares J M, Telo da Gama M M. Reply to "Comment on 'Effect of polydispersity on the ordering transition of adsorbed self-assembled rigid rods' ". Physical Review E. 2012; 5 (85).