

# Document details

[Back to results](#) | 1 of 1

[Export](#) [Download](#) [Print](#) [E-mail](#) [Save to PDF](#) [Add to List](#) [More... >](#)

[Full Text](#) [View at Publisher](#)

AIP Conference Proceedings

Volume 1739, 2 June 2016, Article number 020016

2nd International Conference on Mathematical Sciences and Statistics: Innovations Through Mathematical and Statistical Research, ICMSS 2016; Kuala Lumpur; Malaysia; 26 January 2016 through 28 January 2016; Code 122233

## Ising model on the Cayley tree of second order with left and right interactions (Conference Paper)

Ganikhodjaev, N. Ibrahim, H.H.B.

Department of Computational and Theoretical Sciences, Kuliyyah of Science, International Islamic University Malaysia, Kuantan, Malaysia

### Abstract

[View references \(19\)](#)

In this paper we consider Ising model on the semi-infinite Cayley tree of second order with left and right interaction and investigate the problem of phase transition for this model. © 2016 Author(s).

**ISSN:** 0094243X

**ISBN:** 978-073541396-2

**Source Type:** Conference Proceeding

**Original language:** English

**DOI:** 10.1063/1.4952496

**Document Type:** Conference Paper

**Volume Editors:** Ibrahim S.N.I., Lee L.S., Rana M.S., Lim F.P., Mohd Jaffar M.Z.A., Mustafa M.S., Chen C.Y.

**Sponsors:**

**Publisher:** American Institute of Physics Inc.

### References (19)

[View in search results format >](#)

All [Export](#) [Print](#) [E-mail](#) [Save to PDF](#) [Create bibliography](#)

1 Baxter, R.J.

The inversion relation method for some two-dimensional exactly solved models in lattice statistics

(1982) *Journal of Statistical Physics*, 28 (1), pp. 1-41. Cited 4262 times.  
doi: 10.1007/BF01011621

[View at Publisher](#)

2 Bissacot, R., Cioletti, L.

Phase transition in ferromagnetic ising models with non-uniform external magnetic fields

(2010) *Journal of Statistical Physics*, 139 (5), pp. 769-778. Cited 5 times.  
doi: 10.1007/s10955-010-9961-4

[View at Publisher](#)

3 Bleher, P.M., Ganikhodjaev, N.N.

(1990) *Theory Probab. Appl.*, 35, pp. 216-227. Cited 53 times.

Metrics

0 Citations in Scopus

0 Field-Weighted Citation Impact



PlumX Metrics

Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:

[Set citation alert >](#)

[Set citation feed >](#)

### Related documents

Ising model with competing interactions on cayley tree of order 4: An analytic solution

Ali, R.B. , Mukhamedov, F. , Pah, C.H. (2013) *Journal of Physics: Conference Series*

On ising model with four competing interactions on cayley tree

Ganikhodjaev, N.N. , Rozikov, U.A. (2009) *Mathematical Physics Analysis and Geometry*

An Ising model with three competing interactions on a Cayley tree

Ganikhodjaev, N.N. , Pah, C.H. , Wahiddin, M.R.B. (2004) *Journal of Mathematical Physics*

[View all related documents based on references](#)

- 4 Bleher, P.M., Ruiz, J., Zagrebnov, V.A.  
On the phase diagram of the random field Ising model on the Bethe lattice  
(1998) *Journal of Statistical Physics*, 93 (1-2), pp. 33-78. Cited 23 times.  
[View at Publisher](#)
- 
- 5 Dyson, F.J.  
Existence of a phase-transition in a one-dimensional Ising ferromagnet  
(1969) *Communications in Mathematical Physics*, 12 (2), pp. 91-107. Cited 501 times.  
doi: 10.1007/BF01645907  
[View at Publisher](#)
- 
- 6 Gandolfo, D., Rakhmatullaev, M.M., Rozikov, U.A., Ruiz, J.  
On Free Energies of the Ising Model on the Cayley Tree  
(2013) *Journal of Statistical Physics*, 150 (6), pp. 1201-1217. Cited 8 times.  
doi: 10.1007/s10955-013-0713-0  
[View at Publisher](#)
- 
- 7 Gandolfo, D., Ruiz, J., Shlosman, S.  
A Manifold of Pure Gibbs States of the Ising Model on a Cayley Tree  
(2012) *Journal of Statistical Physics*, 148 (6), pp. 999-1005. Cited 8 times.  
doi: 10.1007/s10955-012-0574-y  
[View at Publisher](#)
- 
- 8 Ganikhodzhaev, N.N., Rozikov, U.A.  
Description of periodic extreme Gibbs measures of some lattice models on the Cayley tree  
(1997) *Theoretical and Mathematical Physics*, 111 (1), pp. 480-486. Cited 64 times.  
[View at Publisher](#)
- 
- 9 Ganikhodjaev, N.N., Rozikov, U.A.  
On ising model with four competing interactions on cayley tree  
(2009) *Mathematical Physics Analysis and Geometry*, 12 (2), pp. 141-156. Cited 23 times.  
doi: 10.1007/s11040-009-9056-0  
[View at Publisher](#)
- 
- 10 Ganikhodzhaev, N.N.  
Exact solution of the Ising model on the Cayley tree with competing ternary and binary interactions  
(2002) *Theoretical and Mathematical Physics*, 130 (3), pp. 419-424. Cited 12 times.  
doi: 10.1023/A:1014771023960  
[View at Publisher](#)
- 
- 11 Ganikhodjaev, N.N., Pah, C.H., Wahiddin, M.R.B.  
Exact solution of an Ising model with competing interactions on a Cayley tree  
(2003) *Journal of Physics A: Mathematical and General*, 36 (15), pp. 4283-4289. Cited 18 times.  
doi: 10.1088/0305-4470/36/15/305  
[View at Publisher](#)

Find more related documents in Scopus based on:

[Authors >](#)