

## LIST OF PUBLICATIONS

1. Botirov G.I., Rozikov U.A., Eshkabilov YU.KH. Phase transitions for a model with uncountable set of spin values on a Cayley tree // *Lobachevskii Journal of Mathematics*, 2013, № 3, V.34, p. [arXiv:1210.7311](https://arxiv.org/abs/1210.7311) 10p.
2. Botirov G.I., Rasulov T.H. Numerical range of a linear operator and its properties // Materials of the international scientific conference "Modern problems of applied mathematics and information technologies-Al-Khorezmiy 2012", Tashkent, 19-22 December 2012, Volume I, pp. 94-96.
3. Botirov G.I. On fixed points of Hammerstein's operator // *Abstracts of the international conference Operator Algebras And Related Topics*, Tashkent, September 12-14, 2012, pp.21-22.
4. Botirov G.I., Xudayarov S.S., A model with uncountable spin values on a Cayley tree // Proceedings X School Of Young Scientists "Non-Local Boundary value problems and problems of modern analysis and informatics", Russia, 2012, pp.31-33.
5. Botirov G.I. Ground States for Potts Model with Competing Interactions on Cayley Tree // *Uzbek Mathematical Journal*, 2011, No-4, p.59-66. [arXiv:1108.3178](https://arxiv.org/abs/1108.3178) P.7
6. Botirov G.I., Pierls condition for Potts model on Cayley tree // *Abstracts of the Conf. of Scientific Reports "New Theorems of Young mathematicians - 2011"*, Karshi, 2011, p.28-32.
7. Botirov G.I., Periodic ground states one Hamiltonian on Cayley tree // [arXiv:0903.2985](https://arxiv.org/abs/0903.2985), ISSN 0001-4346, *Mathematical Notes*, 2010, Vol. 87, No. 4, pp. 582–585.
8. Botirov G.I., Ground states of one model with radius of interactions two on a Cayley tree // *Doklady Acad.Nauk RUz.*, 2009, No 3-4, p.11-16.
9. Botirov G.I., Ground states of a model on Cayley trees // *II congress of the Turkish world mathematicians Almaty*, Kazakhstan, 30.06.2009 - 04.07.2009, p.65-68.
10. Botirov G.I., Ground states of the one model with radius of interactions two on a Cayley tree // *Abstracts of the Conf. of Scientific Reports "New Theorems of Young mathematicians - 2008"*, Samarkhand, 2008, p.31-35.
11. Botirov G.I., Rozikov U.A., Ground states of tree state Potts model on Cayley tree of order two // *Doklady Acad. Nauk RUz.*, 2008. No 2. p. 3-8.
12. Botirov G.I., Nonuniqueness of the Gibbs measure // *Abstracts of the Conf. of Scientific Reports "New Theorems of Young mathematicians -2007"*, Tashkent, 2007, p.109-111.
13. Botirov G.I., Rozikov U.A., On Potts model with competing interactions on Cayley tree: contour method // *Theor. Math. Phys.*, 2007, 153 (1), p.1423-1433.
14. Botirov G.I., Contours on a Cayley tree // *Abstracts of the Conf. of Scientific Reports "New Theorems of Young mathematicians - 2006"*, Namangan, 15-16 November 2006, p. 34-38.

15. Botirov G.I., Rozikov U.A., On q-component models on the Cayley tree: the general case // *Jour. Stat. Mech:Theory and Expem.* 2006, p.10006, 8 pages.
16. Botirov G.I., Harmonic functions on Cayley tree // *Abstracts of the Conf. of Scientific Reports" New Theorems of Young mathematicians -2005"*, Tashkent, 2005, p.10-14.