

List of publications

Zengo Tsuboi (坪井禪吾)

1. Papers with referees

1. Zengo Tsuboi and Masuo Suzuki: Determining equations for higher-order decomposition of exponential operators, International Journal of Modern Physics B9 (1995) 3241-3268; arXiv:0912.0066 [math-ph].
2. Zengo Tsuboi and Atsuo Kuniba: Solutions of a discretized Toda field equation for D_r from Analytic Bethe Ansatz, Journal of Physics A: Mathematical and General 29 (1996) 7785-7796; arXiv:hep-th/9608002.
3. Zengo Tsuboi: Solutions of Discretized Affine Toda field equations for $A_n^{(1)}$, $B_n^{(1)}$, $C_n^{(1)}$, $D_n^{(1)}$, $A_n^{(2)}$ and $D_{n+1}^{(2)}$, Journal of the Physical Society of Japan 66 (1997) 3391-3398; arXiv:solv-int/9610011.
4. Zengo Tsuboi: Analytic Bethe ansatz and functional equations for Lie superalgebra $sl(r+1|s+1)$, Journal of Physics A: Mathematical and General 30 (1997) 7975-7991; arXiv:0911.5386 [math-ph].
5. Zengo Tsuboi: Analytic Bethe ansatz and functional equations associated with any simple root systems of the Lie superalgebra $sl(r + 1|s + 1)$, Physica A 252 (1998) 565-585; arXiv:0911.5387 [math-ph].
6. Zengo Tsuboi: Analytic Bethe ansatz related to a one-parameter family of finite-dimensional representations of the Lie superalgebra $sl(r+1|s+1)$, Journal of Physics A: Mathematical and General 31 (1998) 5485-5498; arXiv:0911.5389 [math-ph].
7. Zengo Tsuboi: Analytic Bethe ansatz related to the Lie superalgebra $C(s)$, Physica A 267 (1999) 173-208; arXiv:0911.5390 [math-ph].
8. Zengo Tsuboi: Analytic Bethe ansatz and functional relations related to tensor-like representations of type-II Lie superalgebras $B(r|s)$ and $D(r|s)$, Journal of Physics A: Mathematical and General 32 (1999) 7175-7206; arXiv:0911.5393 [math-ph].
9. Kazumitsu Sakai and Zengo Tsuboi: Thermodynamic Bethe ansatz equation for $osp(1|2)$ integrable spin chain, Modern Physics Letters A 14 (1999) 2427-2435; arXiv:math-ph/9911010.
10. Kazumitsu Sakai and Zengo Tsuboi: Thermodynamic Bethe ansatz equation from fusion hierarchy of $osp(1|2)$ integrable spin chain, International Journal of Modern Physics A 15 (2000) 2329-2346; arXiv:math-ph/9912014.
11. Kazumitsu Sakai and Zengo Tsuboi: Thermodynamics of $osp(1|2)$ integrable spin chain: Finite size correction, Journal of the Physical Society of Japan 70 (2001) 367-371; arXiv:cond-mat/0011240 [cond-mat.stat-mech].

12. Atsuo Kuniba, Tomoki Nakanishi and Zengo Tsuboi: The Bethe equation at $q = 0$, the Möbius inversion formula, and weight multiplicities: III. the $X_N^{(r)}$ case, Letters in Mathematical Physics 59 (2002) 19-31; arXiv:math/0105146 [math.QA].
13. Atsuo Kuniba, Tomoki Nakanishi and Zengo Tsuboi: The canonical solutions of the Q -systems and the Kirillov-Reshetikhin conjecture, Communications in Mathematical Physics 227 (2002) 155-190; arXiv:math/0105145 [math.QA].
14. Goro Hatayama, Atsuo Kuniba, Masato Okado, Taichiro Takagi and Zengo Tsuboi: Paths, Crystals and Fermionic Formula, Progress in Mathematical Physics 23 (2002) 205-272; arXiv:math/0102113 [math.QA].
15. Zengo Tsuboi: A note on the $osp(1|2s)$ thermodynamic Bethe ansatz equation, International Journal of Modern Physics A 17 (2002) 2351-2368; arXiv:cond-mat/0108358 [cond-mat.stat-mech].
16. Zengo Tsuboi: Difference L operators and a Casorati determinant solution to the T -system for twisted quantum affine algebras, Journal of Physics A: Mathematical and General 35 (2002) 4363-4373; arXiv:0911.5368 [math-ph].
17. Zengo Tsuboi: Integral equations for thermodynamics of the $osp(1|2s)$ integrable spin chain, Physics Letters B 544 (2002) 222-230; arXiv:math-ph/0209024.
18. Zengo Tsuboi : Nonlinear integral equations for thermodynamics of the $sl(r+1)$ Uimin-Sutherland model, Journal of Physics A: Mathematical and General 36 (2003) 1493-1507; arXiv:cond-mat/0212280 [cond-mat.stat-mech].
19. Murray T. Batchelor, Xi-Wen Guan, Norman Oelkers, Kazumitsu Sakai, Zengo Tsuboi, Angela Foerster: Exact results for the thermal and magnetic properties of strong coupling ladder compounds, Physical Review Letters 91 (2003) 217202; arXiv:cond-mat/0309244 [cond-mat.stat-mech].
20. Zengo Tsuboi: From the quantum Jacobi-Trudi and Giambelli formula to a nonlinear integral equation for thermodynamics of the higher spin Heisenberg model, Journal of Physics A: Mathematical and General 37 (2004) 1747-1758; arXiv:cond-mat/0308333 [cond-mat.stat-mech].
21. Zengo Tsuboi, Minoru Takahashi: Nonlinear Integral Equations for Thermodynamics of the $U_q(\widehat{sl(r+1)})$ Perk-Schultz Model, Journal of the Physical Society of Japan 74 (2005) 898-904; arXiv:cond-mat/0412698 [cond-mat.stat-mech].
22. Zengo Tsuboi, Masahiro Shiroishi: High temperature expansion of emptiness formation probability for isotropic Heisenberg chain, Journal of Physics A: Mathematical and General 38 (2005) L363-L370; arXiv:cond-mat/0502569 [cond-mat.stat-mech].

23. Zengo Tsuboi: Nonlinear integral equations and high temperature expansion for the $U_q(\hat{sl}(r+1|s+1))$ Perk-Schultz Model, Nuclear Physics B737 [FS] (2006) 261-290; arXiv:cond-mat/0510458 [cond-mat.stat-mech].
24. Zengo Tsuboi: A note on the high temperature expansion of the density matrix for the isotropic Heisenberg chain, Physica A377 (2007) 95-101; arXiv:cond-mat/0611454 [cond-mat.stat-mech].
25. M. T. Batchelor, X.-W. Guan, N. Oelkers, Z. Tsuboi: Integrable models and quantum spin ladders: comparison between theory and experiment for the strong coupling compounds, Advances in Physics 56 (2007) 465-543; arXiv:cond-mat/0512489 [cond-mat.stat-mech].
26. Vladimir V. Bazhanov, Zengo Tsuboi: Baxter's Q-operators for supersymmetric spin chains, Nuclear Physics B805 [FS] (2008) 451-516; arXiv:0805.4274 [hep-th].
27. Zengo Tsuboi: Solutions of the T -system and Baxter equations for supersymmetric spin chains, Nuclear Physics B826 [PM] (2010) 399-455; arXiv:0906.2039 [math-ph].
28. Nikolay Gromov, Vladimir Kazakov, Zengo Tsuboi: $PSU(2,2|4)$ Character of Quasiclassical AdS/CFT, Journal of High Energy Physics 1007 (2010) 097; arXiv:1002.3981 [hep-th].

2. Preprint

29. Nikolay Gromov, Vladimir Kazakov, Sebastien Leurent, Zengo Tsuboi: Wronskian Solution for AdS/CFT Y-system, arXiv:1010.2720 [hep-th].
30. Vladimir Kazakov, Sebastien Leurent, Zengo Tsuboi: Baxter's Q-operators and operatorial Bäcklund flow for quantum (super)-spin chains, arXiv:1010.4022 [math-ph].

3. Paper without referees

31. 坪井禪吾: T -system and thermodynamic Bethe ansatz equations for solvable lattice models associated with superalgebras, 短期共同研究「可積分系研究における双線形化法とその周辺」(2001年7月, 京都大学数理解析研究所)の報告書, 数理解析研究所講究録 1280, 2002年8月, 19頁-34頁; arXiv:0912.0073 [math-ph].

4. Thesis

32. 指数演算子高次分解の基礎に関する研究, 総頁数: 108頁, 修士論文(東京大学大学院理学系研究科修理第6507号), 1995年3月.
33. Analytic Bethe ansatz and functional relations in solvable lattice models(可解格子模型における解析的ベーテ仮説と函数関係式), 総頁数: 152頁, 博士論文(東京大学大学院理学系研究科博理第3360号), 1998年3月.