

List of publications

1 Papers with referees

1. Zengo Tsuboi, Masuo Suzuki: Determining equations for higher-order decomposition of exponential operators, *International Journal of Modern Physics B* 9 (1995) 3241-3268; arXiv:0912.0066 [math-ph].
2. Zengo Tsuboi, 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, 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, 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, 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, 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, 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, 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 non-linear 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 $U_q(\widehat{sl}(r+1|s+1))$ Perk-Schultz Model, *Nuclear Physics B* 737 [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 A* 377 (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 B* 805 [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 B* 826 [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* 07 (2010) 097 (39 pages); arXiv:1002.3981 [hep-th].
29. Nikolay Gromov, Vladimir Kazakov, Sebastien Leurent, Zengo Tsuboi: Wronskian Solution for AdS/CFT Y-system, *Journal of High Energy Physics* 01 (2011) 155 (31 pages); 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, *Communications in Mathematical Physics* 311 (2012) 787-814; arXiv:1010.4022 [math-ph].
31. Zengo Tsuboi: Wronskian solutions of the T , Q and Y -systems related to infinite dimensional unitarizable modules of the general linear superalgebra $gl(M|N)$, *Nuclear Physics B* 870 [FS] (2013) 92-137; arXiv:1109.5524 [hep-th].
32. Alexander Alexandrov, Vladimir Kazakov, Sebastien Leurent, Zengo Tsuboi, Anton Zabrodin: Classical tau-function for quantum spin chains, *Journal of High Energy Physics* 09 (2013) 064 (64 pages); arXiv:1112.3310 [math-ph].
33. Alexander Alexandrov, Sebastien Leurent, Zengo Tsuboi, Anton Zabrodin: The master T-operator for the Gaudin model and the KP hierarchy, *Nuclear Physics B* 883 (2014) 173-223; arXiv:1306.1111 [math-ph].
34. Sergey Khoroshkin, Zengo Tsuboi: The universal R-matrix and factorization of the L-operators related to the Baxter Q-operators, *Journal of Physics A: Mathematical and Theoretical* 47 (2014) 192003 (11 pages); arXiv:1401.0474 [math-ph].
35. Zengo Tsuboi: Asymptotic representations and q-oscillator solutions of the graded Yang-Baxter equation related to Baxter Q-operators, *Nuclear Physics B* 886 (2014) 1-30; arXiv:1205.1471 [math-ph].
36. Zengo Tsuboi, Anton Zabrodin, Andrei Zotov: Supersymmetric quantum spin chains and classical integrable systems, *Journal of High Energy Physics* 05 (2015) 086 (42 pages); arXiv:1412.2586 [math-ph].
37. Vladimir Mitev, Matthias Staudacher, Zengo Tsuboi: The Tetrahedral Zamolodchikov Algebra and the $AdS_5 \times S^5$ S-matrix, *Communications in Mathematical Physics* 354 (2017) 1-30; arXiv:1210.2172 [math-ph].
38. Zengo Tsuboi: Quantum groups, Yang-Baxter maps and quasi-determinants, *Nuclear Physics B* 926 (2018) 200-238; arXiv:1708.06323 [math-ph].
39. Pascal Baseilhac, Zengo Tsuboi: Asymptotic representations of augmented q-Onsager algebra and boundary K-operators related to Baxter Q-operators, *Nuclear Physics B* 929 (2018) 397-437; arXiv:1707.04574 [math-ph].

40. Zengo Tsuboi: On diagonal solutions of the reflection equation, *Journal of Physics A: Mathematical and Theoretical* 52 (2019) 155201 (19 pages); arXiv:1811.10407 [math-ph].

2 Paper without referees

41. Zengo Tsuboi: T -system and thermodynamic Bethe ansatz equations for solvable lattice models associated with superalgebras, *Bilinear method in the study of integrable systems and related topics* (Kyoto, 2001), *RIMS Kokyuroku* 1280 (2002) 19-34; arXiv:0912.0073 [math-ph].

3 Thesis

42. Zengo Tsuboi: Study on the basis of the higher-order decomposition of exponential operators (in Japanese), (108 pages), Department of Physics, Graduate School of Science, the University of Tokyo (master thesis, no.6507), March 1995.
43. Zengo Tsuboi: Analytic Bethe ansatz and functional relations in solvable lattice models, (152 pages), Department of Physics, Graduate School of Science, the University of Tokyo (doctor thesis, no.3360), March 1998.