

## 2010 年度 日比チーム発表論文

1. 青木敏, 大津起夫, 竹村彰通, 沼田泰英, 「大学入試センター試験科目データの統計解析」  
応用統計学 39(2010), 71--100.
2. H. Hara and A. Takemura, Connecting tables with zero-one entries by a subset of a Markov basis, Algebraic Methods in Statistics and Probability II (M. A. G. Viana and H. P. Wynn, Eds.), Contemporary Mathematics, vol. 516, Amer. Math. Soc., Providence, RI, 2010, pp. 199--213.
3. H. Hara and A. Takemura, A localization approach to improve iterative proportional scaling in Gaussian graphical models, Communications in Statistics Theory and Methods 39 (2010), 1643--1654. (doi:10.1080/03610920802238662)
4. S. Aoki, Some optimal criteria of model-robustness for two-level non-regular fractional factorial designs, Annals of the Institute of Statistical Mathematics 62 (2010) 699--716. (doi: 10.1007/s10463-010-0292-7)
5. H. Hara, S. Aoki and A. Takemura, Minimal and minimal invariant Markov bases of decomposable models for contingency tables, Bernoulli 16 (2010), 208--233. (doi:10.3150.09-BEJ207)
6. S. Aoki, T. Hibi, H. Ohsugi and A. Takemura, Markov basis and Grobner basis of Segre--Veronese configuration for testing independence in group-wise selections, Annals of the Institute of Statistical Mathematics, 62 (2010) 299--321. (doi:10.1007/s10463-008-0171-7)
7. S. Aoki, and A. Takemura, Markov chain Monte Carlo tests for designed experiments, Journal of Statistical Planning and Inference 140 (2010), 817--830. (doi:10.1016/j.jspi.2009.09.010)
8. A. Takeda, S. Taguchi and T. Tanaka, A Relaxation Algorithm with a Probabilistic Guarantee for Robust Deviation Optimization, Computational Optimization and Applications 47 (2010), 1--31. (doi: 10.1007/s10589-008-9212-7).
9. J. Cho, T. Hamada, and J. Inoguchi, On three dimensional real hypersurface in

complex space form, *Tokyo Journal of Mathematics* 33, (2010), 31--47.  
(doi:10.3836/tjm/1279719576)

10. K. Nishiyama and M. Noro, Stratification associated with local b-functions, *J. of Symb. Comput.* 45 (2010), 462--480. (doi:10.1016/j.jsc.2010.01.003)
11. M. Noro, New algorithms for computing primary decomposition of polynomial ideals, *Lecture Notes in Computer Science*, vol. 6327, Springer, 2010, pp. 233--244.
12. H. Nakayama and K. Nishiyama, An algorithm of computing inhomogeneous differential equations for definite integrals, *Lecture Notes in Computer Science*, vol. 6327, Springer, 2010, pp. 221--232. (doi: 10.1007/978-3-642-15582-6\_39)
13. H. Ohsugi, Normality of cut polytopes of graphs is a minor closed property, *Discrete Mathematics* 310 (2010), 1160--1166. (doi:10.1016/j.disc.2009.11.012)
14. H. Ohsugi and T. Hibi, Non-very ample configurations arising from contingency tables, *Annals of the Institute of Statistical Mathematics* 62 (2010), 639--644. (doi:10.1007/s10463-010-0288-3)
15. H. Ohsugi and T. Hibi, Toric rings and ideals of nested configurations, *J. of Comm. Alg.* 2 (2010), 187--208. (doi:10.1216/JCA-2010-2-2-187)[Segre-Veronese]
16. S. Kuriki and Y. Numata, Graph presentations for moments of noncentral Wishart distributions and their applications, *Annals of the Institute of Statistical Mathematics*, 62 (2010), 645--672. (doi:10.1007/s10463-010-0279-4)
17. K. Kimura, Arithmetical rank of Cohen-Macaulay squarefree monomial ideals of height two, *J. Comm. Alg.* 3 (2011), 31--46. (doi:10.1216/JCA-2011-3-1-31)
18. T. Hibi and A. Higashitani, Smooth Fano polytopes arising from finite partially ordered sets, *Discrete & Comput. Geom.*, in press. (doi:10.1007/s00454-010-9271-2)
19. T. Hibi, A. Higashitani and Y. Nagazawa, Ehrhart polynomials of convex polytopes with small volumes, *European J. Combinatorics*, in press.

20. J. Herzog, T. Hibi and H. Ohsugi, Powers of componentwise linear ideals, *Combinatorial Aspects of Commutative Algebra and Algebraic Geometry*, Springer, in press.
21. H. Kamiya, A. Takemura and H. Terao, Ranking patterns of unfolding models of codimension one, *Adv. in Appl. Math.*, to appear. (doi:10.1016/j.aam.2010.11.002)
22. T. Sei, N. Takayama, A. Takemura, H. Nakayama, K. Nishiyama, M. Noro and K. Ohara, Holonomic Gradient Descent and its Application to Fisher--Bingham Integral, *Adv. Appl. Math.*, to appear. (doi:10.1016/j.aam.2011.03.001)
23. T. Shibuta, Toric ideals for high Veronese subrings of toric algebras, *Illinois Journal of Mathematics*, to appear.
24. T. Maeno, Y. Numata and A. Wachi, Strong Lefschetz elements of the coinvariant rings of finite Coxeter groups, *Algebras and Representation Theory*, to appear. (doi:10.1007/s10468-010-9207-9)
25. 只木孝太郎, 辻井重男, 「ランク攻撃の厳密解析 I」日本応用数学会 論文誌, 第 21 巻 第 1 号(2011 年 3 月 25 日)
26. K. Tadaki, A statistical mechanical interpretation of algorithmic information theory III: Composite systems and fixed points, *Mathematical Structures in Computer Science*, to appear.
27. T. Hibi, A. Higashitani and H. Ohsugi, Roots of Ehrhart polynomials of Gorenstein Fano polytopes, *Proceedings of the American Mathematical Society*, in press.
28. T. Matsui, A. Higashitani, Y. Nagazawa, H. Ohsugi and T. Hibi, Roots of Ehrhart polynomials arising from graphs, *Journal of Algebraic Combinatorics*, to appear.
29. K. Kimura, N. Terai and K. Yoshida, Schmitt--Vogel type lemma for reductions, *Archiv der Mathematik*, to appear.
30. T. Hibi, A. Higashitani, K. Kimura and A. B. O'Keefe, Depth of edge rings arising from finite graphs, *Proc. Amer. Math. Soc.*, to appear.

31. H. Koizumi, Y. Numata, A. Takemura, On intersection lattices of hyperplane arrangements generated by generic points, *Annals of Combinatorics*, to appear.