2009 年度　日比チーム発表論文

1. T. Hibi, K. Kimura and S. Murai, Betti numbers of chordal graphs and f-vectors of simplicial complexes, J. Algebra 323 (2010), 1678--1689. (doi:10.1016/j.jalgebra.2009.12.029)

2. S. Aoki and A. Takemura, Markov chain Monte Carlo tests for designed experiments, J. Stat. Plan. Inf. 140 (2010), 817--830. (doi:10.1016/j.jspi.2009.09.010)

3. K. Tadaki, A statistical mechanical interpretation of algorithmic information theory: Total statistical mechanical interpretation based on physical argument, J. Physics 201 (2010), 012006 (10pp). (doi:10.1088/1742-6596/201/1/012006)

4. S. Aoki and A. Takemura, A short survey on design of experiments and Groebner bases (和文). Bulletin of Japan Society for Symbolic and Algebraic Computation 16 (2009), 15--22.

5. F.-J. Castro-Jimenez and N. Takayama, The computation of the logarithmic cohomology for plane curves, J. Algebra 322 (2009), 3839--3851. (doi:10.1016/j.jalgebra.2009.03.039)

6. R. Okazaki and K. Yanagawa, Dualizing complex of a toric face ring, Nagoya Math. J. 196 (2009), 87--116.

7. S. Aoki and A. Takemura, Some characterizations of affinely full-dimensional factorial designs, J. Stat. Plan. Inf. 139 (2009), 3525--3532. (doi:10.1016/j.jspi.2009.04.002)

8. T. Sei, S. Aoki and A. Takemura, Perturbation method for determining group of invariance of hierarchical models, Adv. Appl. Math. 43 (2009), 375--389. (doi:10.1016/j.aam.2009.02.005)

9. T. Shibuta and S. Takagi, Log canonical thresholds of binomial ideals, Manuscripta Math. 130 (2009), 45--61. (doi:10.1007/s00229-009-0270-7)

10. K. Tadaki, Chaitin Ω numbers and halting problems, Lecture Notes in Computer Science, Vol. 5635, 2009, pp. 447--456. (doi:10.1007/978-3-642-03073-4_46)

11. K. Tadaki, Partial randomness and dimension of recursively enumerable reals, Lecture Notes in Computer Science, Vol. 5734, 2009, pp. 687--699. (doi:10.1007/978-3-642-03816-7_58)

12. M. Noro, Modular Algorithms for Computing a Generating Set of the Syzygy Module, Lecture Notes in Computer Science, Vol. 5743, 2009, pp. 259--268. (doi: 10.1007/978-3-642-04103-7_23)

13. S. Aoki and A. Takemura, Statistics and Groebner bases – the origin and development of computational algebraic statistics, American Mathematical Society Translations, Series 2, Volume 227, 2009, pp. 125--145.

14. S. Kuriki and A. Takemura, Volume of tubes and distribution of the maxima of Gaussian random fields, American Mathematical Society Translations, Series 2, Volume 227, (2009),

pp. 25--48.

15. K. Kimura, Lyubeznik resolutions and the arithmetical rank of monomial ideals, Proc. Amer. Math. Soc. 137 (2009), 3627--3635. (doi:10.1090/S0002-9939-09-09950-X)

16. A. Takeda, Generalization Performance of nu-Support Vector Classifier Based on Conditional Value-at-Risk Minimization, Neurocomputing 72 (2009), 2351--2358. (doi:10.1016/j.neucom.2008.11.022)

17. T. Hamada and K. Shiohama, Complete real hypersurfaces in compact rank one symmetric spaces, Proc. AMS 137 (2009), 3905--3910. (doi:10.1090/S0002-9939-09-09959-6)

18. A. Takeda and M. Sugiyama, On generalization peformance and non-convex optimization of extended nu-support vector machine, New Generation Computing 27 (2009), 259--279.

19. K. Kimura, N. Terai, and K. Yoshida, Arithmetical rank of squarefree monomial ideals of small arithmetic degree, Journal of Algebraic Combinatorics 29 (2009), 389--404. (doi:10.1007/s10801-008-0142-3)

20. H. Ohsugi and T. Hibi, Two way subtable sum problems and quadratic Gröbner bases, Proc. Amer. Math. Soc. 137 (2009), 1539--1542. (doi:10.1090/S0002-9939-08-09675-5)

21. J. Herzog, T. Hibi and N. V. Trung, Vertex cover algebras of unimodular hypergraphs, Proc. Amer. Math. Soc. 137 (2009), 409--414. (doi:10.1090/S0002-9939-08-09308-8)

22. A. Takemura, Some recent topics from computational algebraic statistics (和文), Journal of the Japan Statistical Society, Series J, 39 (2009), 137--159.

23. S. Murai and T. Hibi, Algebraic shifting and graded Betti numbers, Trans. Amer. Math. Soc. 361 (2009), 1853--1865. (doi:10.1090/S0002-9947-08-04707-7)

24. R. Hemmecke, A. Takemura and R. Yoshida, Computing holes in semi-groups and its applications to transportation problems, Contribut. Disc. Math. 4 (2009), 81--91. (doi:無)

25. S. Aoki, and A. Takemura, Markov basis for design of experiments with three-level factors, Algebraic and Geometric Methods in Statistics, Cambridge Univ. Press, 2009, pp. 225--238.

26. Y. Komori, M. Noumi and J. Shiraishi, Kernel functions for difference operators of Ruijsenaars type and their applications, SIGMA 5 (2009), 054, 40 pages. (doi:10.3842/SIGMA.2009.054)

27. H. Ohsugi and T. Hibi, Non-very ample configurations arising from contingency tables, Annals of the Institute of Statistical Math., in press. (doi:10.1007/s10463-010-0288-3)

28. H. Ohsugi, Normality of cut polytopes of graphs is a minor closed property, Discrete Mathematics, in press. (doi:10.1016/j.disc.2009.11.012)

29. K. Nishiyama and M. Noro, Stratification associated with local b-functions, Journal of Symbolic Computation, in press. (doi:10.1016/j.jsc.2010.01.003)

30. J. Herzog, T. Hibi, F. Hreinsdottir, T. Kahle and J. Rauh, Binomial edge ideals and

conditional independence statements, Advances in Applied Mathematics, in press. (doi:10.1016/j.aam.2010.01. 00)

31. H. Ohsugi and T. Hibi, Toric rings and ideals of nested configurations, Journal of Commutative Algebra, in press. (doi:10.1216/JCA-2010-2-2-1)

32. S. Kuriki and Y. Numata, Graph presentations for moments of noncentral Wishart distributions and their applications, Annals of the Institute of Statistical Mathematics, to appear.

33. H. Hara and A. Takemura, Connecting tables with zero-one entries by a subset of a Markov basis, Algebraic Methods in Statistics and Probability, Amer. Math. Soc., 2009, to appear.

34. R. Okazaki, A lower bound of Stanley depth of monomial ideals, Journal of Commutative Algebra, to appear.

35. S. Aoki, Some optimal criteria of model-robustness for two-level non-regular fractional factorial designs, Annals Inst. Stat. Math., to appear. (doi:10.1007/s10463-010-0292-7)