SCAN ALGORITHMS AND HECKE ALGEBRAS

LIST OF TALKS

(1) Introduction and probabilistic background, [3, (1,2a-2c)]: Guido
18.6.08
(2) Basic properties of Hecke algebras, [3, (3a,3b)], [1, (§11D)]: Jean-Marie
18.6.08
(3) Basic properties of finite reflection groups, [5, (1.1,1.6,1.9,1.10,1.11,3.5,3.7)]: Nils
2.7.08
(4) Stationary distributions on finite reflection groups, [3, (2e)]: Guido
2.7.08
(5) Iwahori-Hecke algebras, Metropolis walks and systematic scans on W, , [2, §68], [3, (3c,4a-b)]: Daiva
9.7.08
(6) Examples: Hypercubes and dihedral groups, [3, (5,6)]: Probabilist, t.b.a.
9.7.08
(7) Examples: Symmetric groups I, [3, (7a-7b)], [4]: Andre
11.7.08
(8) Examples: Symmetric groups II, [3, (7c)]: Probabilist, t.b.a.
16.7.08

References

[1] C. Curtis and I. Reiner, *Methods of Representation Theory, I.* Wiley Interscience, New York 1990.
[2] ———, *Methods of Representation Theory, II.* Wiley Interscience, New York 1990.
[3] P. Diaconis and A. Ram, *Analysis of systematic scan Metropolis algorithms using Iwahori-Hecke algebra techniques.* Michigan Math. J. **48** (2000), 157–190.
[4] W. Fulton, *Young Tableaux.* London Math. Soc. Student Texts **35**. Cambridge University Press, 1997.
[5] J. Humphreys, *Reflection Groups and Coxeter Groups.* Cambridge Studies in Advanced Mathematics **29**, Cambridge University Press, 1990.

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