

List of Publications

Klaus Dohmen

1985–2023

1. K. Dohmen. *On the Number of Regular Elements in \mathbb{Z}_n* . 2023. arXiv: [2304.02471](https://arxiv.org/abs/2304.02471) [[math.CO](https://arxiv.org/abs/2304.02471)].
2. K. Dohmen. *The Orbital Chromatic Polynomial of a Cycle*. 2020. arXiv: [2009.08235](https://arxiv.org/abs/2009.08235) [[math.CO](https://arxiv.org/abs/2009.08235)].
3. K. Dohmen. “Closed-form Expansions for the Universal Edge Elimination Polynomial”. In: *Australas. J. Combin.* 63.2 (2015), pp. 196–201.
4. K. Dohmen and M. Trinks. “An Abstraction of Whitney’s Broken Circuit Theorem”. In: *Electron. J. Combin.* 21 (2014), #P4.32. doi: [10.37236/4356](https://doi.org/10.37236/4356).
5. K. Dohmen. “Lower Bounds for the Probability of a Union via Chordal Graphs”. In: *Electron. Commun. Probab.* 18.70 (2013), pp. 1–4. doi: [10.1214/ECP.v18-2357](https://doi.org/10.1214/ECP.v18-2357).
6. K. Dohmen and P. Tittmann. “Domination Reliability”. In: *Electron. J. Combin.* 19 (2012), #P15. doi: [10.37236/1166](https://doi.org/10.37236/1166).
7. K. Dohmen. “An Inductive Proof of Whitney’s Broken Circuit Theorem”. In: *Discuss. Math. Graph Theory* 31.3 (2011), pp. 509–517. doi: [10.7151/dmgt.1561](https://doi.org/10.7151/dmgt.1561).
8. K. Dohmen. “Dual-Screen Presentations with the \LaTeX Beamer Class under X”. In: *PracTeX J.* 5.1 (2010). url: <http://tug.org/pracjourn/2010-1/dohmen>.
9. K. Dohmen and P. Tittmann. “Bonferroni-type Inequalities and Binomially Bounded Functions”. In: *Discrete Math.* 310.6/7 (2010), pp. 1265–1268. doi: [10.1016/j.disc.2009.11.031](https://doi.org/10.1016/j.disc.2009.11.031).
10. K. Dohmen and P. Tittmann. “Improved Bonferroni Inequalities and Binomially Bounded Functions”. In: *Electron. Notes Discrete Math.* 28 (2007), pp. 91–93. doi: [10.1016/j.endm.2007.01.013](https://doi.org/10.1016/j.endm.2007.01.013).
11. K. Dohmen and P. Tittmann. “Bonferroni-Galambos Inequalities for Partition Lattices”. In: *Electron. J. Combin.* 11.1 (2004), #R85. doi: [10.37236/1838](https://doi.org/10.37236/1838).

12. K. Dohmen and P. Tittmann. "Inequalities of Bonferroni-Galambos type with Applications to the Tutte Polynomial and the Chromatic Polynomial". In: *JIPAM, J. Inequal. Pure Appl. Math.* 5.3 (2004), Article No. 64.
13. K. Dohmen. *Improved Bonferroni Inequalities via Abstract Tubes. Inequalities and Identities of Inclusion-Exclusion Type*. Vol. 1826. Lecture Notes in Mathematics. Berlin and Heidelberg: Springer-Verlag, 2003. 113 pp. isbn: 3-540-20025-8. doi: [10.1007/b13785](https://doi.org/10.1007/b13785).
14. K. Dohmen. "Improved Inclusion-Exclusion Identities and Bonferroni Inequalities with Reliability Applications". In: *SIAM J. Discrete Math.* 16.1 (2003), pp. 156–171. doi: [10.1137/S0895480101392630](https://doi.org/10.1137/S0895480101392630).
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17. K. Dohmen. "Bonferroni-type Inequalities via Chordal Graphs". In: *Comb. Probab. Comput.* 11.4 (2002), pp. 349–351. doi: [10.1017/S0963548302005151](https://doi.org/10.1017/S0963548302005151).
18. K. Dohmen. "Improved Inclusion-Exclusion for Valuations on Distributive Lattices". In: *Ars Combin.* 64 (2002), pp. 225–230.
19. K. Dohmen. "Kernel Operators and Improved Inclusion-Exclusion Bounds". In: *Australas. J. Combin.* 26 (2002), pp. 219–224.
20. K. Dohmen. "On Dependent Families of Sets". In: *Util. Math.* 61 (2002), pp. 125–128.
21. K. Dohmen. "A Combinatorial Approach to Improved Bonferroni Inequalities". In: *Ars Combin.* 59 (2001), pp. 245–251.
22. K. Dohmen. "A New Perspective on the Union-Closed Sets Conjecture". In: *Ars Combin.* 58 (2001), pp. 183–185.
23. K. Dohmen. "A Note on Inclusion-Exclusion on Semilattices". In: *Util. Math.* 59 (2001), pp. 125–127.
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28. K. Dohmen. "Inclusion-Exclusion: Which Terms Cancel?" In: *Arch. Math.* 74.4 (2000), pp. 314–316. doi: [10.1007/s000130050448](https://doi.org/10.1007/s000130050448).
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30. K. Dohmen. "On the Number of Precolouring Extensions". In: *European J. Combin.* 21.8 (2000), pp. 989–992. doi: [10.1006/eujc.1999.0411](https://doi.org/10.1006/eujc.1999.0411).
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33. K. Dohmen. "An Improvement of the Inclusion-Exclusion Principle". In: *Arch. Math.* 72.4 (1999), pp. 298–303. doi: [10.1007/s000130050336](https://doi.org/10.1007/s000130050336).
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35. K. Dohmen. *Convex Geometric Inclusion-Exclusion Identities and Bonferroni Inequalities with Applications to System Reliability Analysis and Reliability Covering Problems*. Informatik-Bericht Nr. 132. Humboldt-Universität zu Berlin, 1999. 20 pp.
36. K. Dohmen. "Improved Bonferroni Bounds for the Reliability of a Communication Network". In: *Safety and Reliability*. Proceedings of the Tenth European Conference on Safety and Reliability, ESREL'99 (München-Garching, September 13–17, 1999). Ed. by G. I. Schuëller and P. Kafka. Vol. 1. 2 vols. Rotterdam and Brookfield: Balkema Publishers, 1999, pp. 67–71. isbn: 90-5809-110-4.
37. K. Dohmen. "Improved Inclusion-Exclusion Identities and Inequalities Based on a Particular Class of Abstract Tubes". In: *Electron. J. Probab.* 4 (1999), Article No. 5. doi: [10.1214/EJP.v4-42](https://doi.org/10.1214/EJP.v4-42).
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42. K. Dohmen. "Inclusion-Exclusion and Network Reliability". In: *Electron. J. Combin.* 5 (1998), #R36. doi: [10.37236/1374](https://doi.org/10.37236/1374). Printed version: *J. Combin.* 5 (1998), 537–544.
43. K. Dohmen. "A Note on Möbius Inversion over Power Set Lattices". In: *Comment. Math. Univ. Carolin.* 38.1 (1997), pp. 121–124. url: <http://dml.cz/dmlcz/118907>.

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