

GEOMETRIC AND TOPOLOGICAL COMBINATORICS

MSRI Program

August 14 to December 15, 2017

BOOKS

- [1] J. B. BARBANEL, *The geometry of efficient fair division*, Cambridge University Press, Cambridge, 2005, ISBN 0-521-84248-4. MR 2132232. Zbl 1071.91001. doi: 10.1017/CBO9780511546679.
- [2] A. BARVINOK, *A course in convexity*, Graduate Studies in Mathematics **54**, American Mathematical Society, Providence, RI, 2002, ISBN 0-8218-2968-8. MR 1940576. Zbl 1014.52001. doi: 10.1090/gsm/054.
- [3] M. BECK and S. ROBINS, *Computing the continuous discretely: integer-point enumeration in polyhedra*, 2nd ed., Undergraduate Texts in Mathematics, Springer, New York, NY, 2015, ISBN 978-1-4939-2968-9; 978-1-4939-2969-6. MR 3410115. Zbl 1339.52002. doi: 10.1007/978-1-4939-2969-6.
- [4] A. BJÖRNER and F. BRENTI, *Combinatorics of Coxeter groups*, Graduate Texts in Mathematics **231**, Springer, New York, NY, 2005, ISBN 978-3540-442387; 3-540-44238-3. MR 2133266. Zbl 1110.05001. doi: 10.1007/3-540-27596-7.
- [5] A. BJÖRNER, M. LAS VERGNAS, B. STURMFELS, N. WHITE, and G. M. ZIEGLER, *Oriented matroids*, 2nd ed., Encyclopedia of Mathematics and its Applications **46**, Cambridge University Press, Cambridge, 1999, ISBN 0-521-77750-X. MR 1744046. Zbl 0944.52006. doi: 10.1017/CBO9780511586507.
- [6] K. C. BORDER, *Fixed point theorems with applications to economics and game theory*, Cambridge University Press, Cambridge, 1989, ISBN 0-521-38808-2. MR 1161621. Zbl 0732.47050. doi: 10.1017/CBO9780511625756.
- [7] V. M. BUCHSTABER and T. E. PANOV, *Toric topology*, Mathematical Surveys and Monographs **204**, American Mathematical Society, Providence, RI, 2015, ISBN 978-1-4704-2214-1. MR 3363157. Zbl 06471875. doi: 10.1090/surv/204.
- [8] J. A. DE LOERA, J. RAMBAU, and F. SANTOS, *Triangulations: structures for algorithms and applications*, Algorithms and Computation in Mathematics **25**, Springer, Berlin, 2010, ISBN 978-3-642-12970-4. MR 2743368. Zbl 1207.52002. doi: 10.1007/978-3-642-12971-1.
- [9] M. DE LONGUEVILLE, *A course in topological combinatorics*, Springer, New York, 2013, ISBN 978-1-4419-7909-4; 978-1-4419-7910-0. MR 2976494. Zbl 1273.05001. doi: 10.1007/978-1-4419-7910-0.

- [10] D. KOZLOV, *Combinatorial algebraic topology*, Algorithms and Computation in Mathematics **21**, Springer, Berlin, 2008, ISBN 978-3-540-71961-8. MR 2361455. Zbl 1130.55001. doi: 10.1007/978-3-540-71962-5.
- [11] J. MATOUŠEK, *Lectures on discrete geometry*, Graduate Texts in Mathematics **212**, Springer, New York, NY, 2002, ISBN 0-387-95373-6. MR 1899299. Zbl 0999.52006. doi: 10.1007/978-1-4613-0039-7.
- [12] J. MATOUŠEK, *Using the Borsuk–Ulam theorem: lectures on topological methods in combinatorics and geometry*, Springer, Berlin, 2003, ISBN 3-540-00362-2. MR 1988723. Zbl 1234.05002. doi: 10.1007/978-3-540-76649-0.
- [13] E. MILLER and B. STURMFELS, *Combinatorial commutative algebra*, Graduate Texts in Mathematics **227**, Springer, New York, NY, 2005, ISBN 0-387-22356-8. MR 2110098. Zbl 1066.13001. doi: 10.1007/b138602.
- [14] R. R. THOMAS, *Lectures in geometric combinatorics*, Student Mathematical Library **33**, American Mathematical Society, Providence, RI, 2006, ISBN 0-8218-4140-8. MR 2237292. Zbl 1115.52001. doi: 10.1090/stml/033.
- [15] G. M. ZIEGLER, *Lectures on polytopes*, Graduate Texts in Mathematics **152**, Springer, New York, NY, 1995, ISBN 0-387-94365-X. MR 1311028. Zbl 0823.52002. doi: 10.1007/978-1-4613-8431-1.

JOURNALS

- [1] *Combinatorica*, 1981–, János Bolyai Mathematical Society/Springer, Berlin. L. BABAI, L. LOVÁSZ, and A. SCHRIJVER (eds. in chief), ISSN (print) 0209-9683, ISSN (electronic) 1439-6912. Available at <http://link.springer.com/journal/493>.
- [2] *Discrete and Computational Geometry*, 1986–, Springer, Berlin. K. L. CLARKSON and J. PACH, (eds. in chief), ISSN (print) 0179-5376, ISSN (electronic) 1432-0444. Available at <https://rd.springer.com/journal/volumesAndIssues/454>.
- [3] *Electronic Journal of Combinatorics*, 1994–, Australian National University, Canberra. R. BRUALDI, (ed. in chief), ISSN 1077-8926. Available at <http://www.combinatorics.org/ojs/index.php/eljc/issue/archive>.
- [4] *Geometry and Topology*, 1997–, Mathematical Sciences Publishers, Berkeley. Y. ELIASHBERG and C. ROURKE, (managing eds.), ISSN (print) 1465-3060, ISSN (electronic) 1364-0380. Available at <http://www.msp.org/gt>.
- [5] *Journal of Combinatorial Theory Series A*, 1971–, Elsevier, Amsterdam. F. ARDILA, S. CORTEEL, and J. VERSTRAETE (eds. in chief), ISSN 0097-3165. Formerly *Journal of Combinatorial Theory*, volumes 1–9, 1966–1970. Available at <http://www.sciencedirect.com/science/journal/00973165>.
- [6] *Journal of Topology*, 2008–, London Mathematical Society/Wiley, Hoboken. C. TELEMANN, (ed.), ISSN (print) 1753-8416, ISSN (electronic) 1753-8424. Available at [http://londmathsoc.onlinelibrary.wiley.com/hub/journal/10.1112/\(ISSN\)1753-8424/issues](http://londmathsoc.onlinelibrary.wiley.com/hub/journal/10.1112/(ISSN)1753-8424/issues).