

**MATHEMATICS AND COMPUTER SCIENCE
OF
MARKET AND MECHANISM DESIGN**

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- [1] M. BICHLER, *Market design: a linear programming approach to auctions and matching*, Cambridge University Press, Cambridge, UK, 2017, ISBN 978-1-107-17318-7. doi: 10.1017/9781316779873.
- [2] M. BICHLER and J. K. GOEREE (eds.), *Handbook of spectrum auction design*, Cambridge University Press, Cambridge, UK, 2017, ISBN 978-1-107-13534-5; 978-1-316-50114-6. MR 3753601. Zbl 1401.91005. doi: 10.1017/9781316471609.
- [3] F. ECHENIQUE, N. IMMORLICA, and V. V. VAZIRANI (eds.), *Online and matching-based market design*, Cambridge University Press, Cambridge, UK, 2023, ISBN 978-1-108-83199-4. doi: 10.1017/9781108937535.
- [4] D. GUSFIELD and R. W. IRVING, *The stable marriage problem: structure and algorithms*, Foundations of Computing Series, MIT Press, Cambridge, MA, 1989, ISBN 0-262-07118-5. MR 1021242. Zbl 0703.68046.
- [5] D. E. KNUTH, *Stable marriage and its relation to other combinatorial problems: an introduction to the mathematical analysis of algorithms*, CRM Proceedings and Lecture Notes **10**, American Mathematical Society, Providence, RI, 1997, ISBN 0-8218-0603-3. MR 1415126. Zbl 0860.68054. doi: 10.1090/crmp/010.
- [6] L. LOVÁSZ and M. D. PLUMMER, *Matching theory*, AMS Chelsea Publishing, Providence, RI, 2009, Corrected reprint of the 1986 original [MR0859549, ZBL 0618.05001], ISBN 978-0-8218-4759-6. MR 2536865. Zbl 1175.05002. doi: 10.1090/chel/367.
- [7] D. F. MANLOVE, *Algorithmics of matching under preferences*, Series on Theoretical Computer Science **2**, World Scientific, Singapore, 2013, ISBN 978-981-4425-24-7. MR 3309636. Zbl 1283.68018. doi: 10.1142/8591.
- [8] P. MILGROM, *Putting auction theory to work*, Churchill Lectures in Economics, Cambridge University Press, Cambridge, UK, 2004, ISBN 978-0-521-55184-7. doi: 10.1017/CBO9780511813825.
- [9] P. MILGROM, *Discovering prices: auction design in markets with complex constraints*, Kenneth J. Arrow Lecture Series, Columbia University Press, New York, NY, 2017, ISBN 978-0-231175982. doi: 10.7312/milg17598.
- [10] N. NISAN, T. ROUGHGARDEN, E. TARDOS, and V. V. VAZIRANI (eds.), *Algorithmic game theory*, Cambridge University Press, Cambridge, UK, 2007, ISBN 978-0-521-87282-9. Zbl 1130.91005. doi: 10.1017/CBO9780511800481.
- [11] A. E. ROTH, *Who gets what – and why : the new economics of matchmaking and market design*, Houghton Mifflin Harcourt, Boston, MA, 2015, ISBN 978-0-544291133.
- [12] A. E. ROTH and M. A. O. SOTOMAYOR, *Two-sided matching: a study in game-theoretic modeling and analysis*, Econometric Society Monographs **18**, Cambridge University Press, Cambridge, UK, 1990, ISBN 0-521-39015-X. MR 1119308. Zbl 0726.90003. doi: 10.1017/CCOL052139015X.
- [13] A. SCHRIJVER, *Combinatorial optimization: polyhedra and efficiency. Vols. A, B, & C*, Algorithms and Combinatorics **24A–C**, Springer, Cham, Switzerland, 2003, ISBN 3-540-44389-4. MR 1956924. Zbl 1041.90001.

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Bibliography by Martin Bichler, Péter Biró, Scott Kominers, and Alvin Roth.