

## Exact Algorithms: references

Textbook in Exact Algorithms

- Exact Exponential Algorithms [5]: a nice and concise introduction to designing exact algorithms, free download available at <http://dx.doi.org/10.1007/978-3-642-16533-7>

Textbooks in Parameterized Complexity

- Invitation to Fixed-Parameter Algorithms [6]: Easy to read (and short).
- Fundamentals of Parameterized Complexity [4]: A-to-Z in parameterized complexity
- Parameterized Algorithms [3]: an excellent coverage of parameterized algorithms. (and the newest)

Other materials (available online)

- $O^*(5^k)$ -time algorithm for Feedback Vertex Set [2].
- Color coding [1].
- First iterative compression algorithm [7].

## References

- [1] N. Alon, R. Yuster, and U. Zwick. Color-coding. *J. ACM*, 42(4):844–856, July 1995.
- [2] J. Chen, F. V. Fomin, Y. Liu, S. Lu, and Y. Villanger. Improved algorithms for the feedback vertex set problems. In *Algorithms and Data Structures, 10th International Workshop, WADS 2007, Halifax, Canada, August 15-17, 2007, Proceedings*, pages 422–433, 2007.
- [3] M. Cygan, F. V. Fomin, L. Kowalik, D. Lokshtanov, D. Marx, M. Pilipczuk, M. Pilipczuk, and S. Saurabh. *Parameterized Algorithms*. Springer, 2015.
- [4] R. G. Downey and M. R. Fellows. *Fundamentals of Parameterized Complexity*. Texts in Computer Science. Springer, 2013.
- [5] F. V. Fomin and D. Kratsch. *Exact Exponential Algorithms*. Texts in Theoretical Computer Science. An EATCS Series. Springer, 2010.
- [6] R. Niedermeier. *Invitation to Fixed-Parameter Algorithms*. Oxford Lecture Series in Mathematics and its Applications. Oxford, 2006.
- [7] B. Reed, K. Smith, and A. Vetta. Finding odd cycle transversals. *Oper. Res. Lett.*, 32(4):299–301, July 2004.