PUBLICATIONS AND PREPRINTS

TARA ABRISHAMI

Last updated: August 2024

Published and accepted for publication:

[1] **T. Abrishami**, E. Berger, M. Chudnovsky, S. Zerbib. "Graphs with no even holes and no sector wheels are the union of two chordal graphs." *European Journal of Combinatorics* 122 (2024). [arxiv][journal]

[2] **T. Abrishami**, M. Chudnovsky, S. Hajebi, and S. Spirkl. "Induced subgraphs and tree decompositions VI. Graphs with 2-cutsets." *Discrete Mathematics* 348(1), 2025. [arxiv][journal]

[3] **T. Abrishami**, B. Alecu, M. Chudnovsky, S. Hajebi, and S. Spirkl. "Induced subgraphs and tree-decompositions VIII. Excluding a forest in (theta, prism)-free graphs." *Combinatorica* (2024). [arxiv] [journal]

[4] **T. Abrishami**, B. Alecu, M. Chudnovsky, S. Hajebi, S. Spirkl, and K. Vušković. "Tree independence number I. (Even hole, diamond, pyramid)-free graphs." *Journal of Graph Theory*, 106(4) (2024), 923-943. [arxiv] [journal]

[5] **T. Abrishami**, M. Chudnovsky, C. Dibek, and K. Vušković. "Submodular functions and perfect graphs." *Mathematics of Operations Research* (2024). [arxiv] [journal]

[6] **T. Abrishami**, M. Chudnovsky, M. Pilipczuk, and P. Rzążewski. "Max Weight Independent Set in sparse graphs with no long claws." In *41st International Symposium on Theoretical Aspects of Computer Science (STACS 2024), LIPIcs, Volume 289, 1-15.* [arxiv] [conference]

[7] **T. Abrishami**, B. Alecu, M. Chudnovsky, S. Hajebi, and S. Spirkl. "Induced subgraphs and tree-decompositions VII. Basic obstructions in H-free graphs." *Journal of Combinatorial Theory, Series B*, Volume 164 (2024), 443-472. [arxiv] [journal]

[8] **T. Abrishami**, B. Alecu, M. Chudnovsky, S. Hajebi, S. Spirkl, and K. Vušković. "Induced subgraphs and tree decompositions V. One neighbor in a hole." *Journal of Graph Theory*, 105(4) (2021), 542–561. [arxiv] [journal]

[9] **T. Abrishami**, M. Chudnovsky, S. Hajebi, and S. Spirkl. "Induced subgraphs and tree decompositions IV. (Even hole, diamond, pyramid)-free graphs." *Electronic Journal of Combinatorics*, 30(2), 2023, #P2.42. [arxiv] [journal]

[10] **T. Abrishami**, M. Chudnovsky, S. Hajebi, and S. Spirkl. "Induced subgraphs and tree decompositions III. Three-path-configurations and logarithmic treewidth." *Advances in Combinatorics*, 2022:6, 31pp. [arxiv] [journal]

[11] **T. Abrishami**, M. Chudnovsky, C. Dibek, S. Hajebi, P. Rzążewski, S. Spirkl, and K. Vušković. "Induced subgraphs and tree decompositions II. Toward walls and their line

graphs in graphs of bounded degree." *Journal of Combinatorial Theory, Series B*, 124 (2024), 371-403. [arxiv] [journal]

[12] **T. Abrishami**, M. Chudnovsky, C. Dibek, and P. Rzążewski. "Polynomial-time algorithm for Maximum Independent Set in bounded-degree graphs with no long induced claws." *Proceedings of the 2022 Annual ACM-SIAM Symposium on Discrete Algorithms, SODA* 2022, 1448-1470. [arxiv] [conference]

[13] **T. Abrishami**, M. Chudnovsky, and K. Vušković. "Induced subgraphs and tree decompositions I. Even-hole-free graphs of bounded degree." *Journal of Combinatorial Theory, Series B*, 157 (2022), 144-175. [arxiv] [journal]

[14] **T. Abrishami**, M. Chudnovsky, C. Dibek, S. Thomassé, N. Trotignon, and K. Vušković. "Graphs with polynomially many minimal separators." *Journal of Combinatorial Theory, Series B*, 152 (2021), 248-280. [arxiv] [journal]

[15] **T. Abrishami**, M. Chudnovsky, M. Pilipczuk, P. Rzążewski, and P. Seymour. "Induced subgraphs of bounded treewidth and the container method." Extended abstract in *Proceedings of the Thirty-second Annual ACM-SIAM Symposium on Discrete Algorithms, SODA* 2021, 1948-1964. Journal paper in *SIAM Journal on Computing*, 53 (3) (2024), 624–647. [arxiv] [conference] [journal]

[16] **T. Abrishami**, N. Guillen, P. Rule, Z. Schutzman, J. Solomon, T. Weighill, and S. Wu. "Geometry of graph partitions via optimal transport." *SIAM Journal of Scientific Computing*, 42(5), A3340–A3366. [arxiv] [journal]

Submitted:

[17] **T. Abrishami**, M. Briański, J. Czyżewska, R. McCarty, M. Milanič, P. Rzążewski, and B. Walczak. "Excluding a clique or a biclique in classes of bounded induced matching treewidth." Submitted, May 2024.

[18] **T. Abrishami**, B. Alecu, M. Chudnovsky, S. Hajebi, and S. Spirkl. "Induced subgraphs and tree-decompositions X. Towards logarithmic treewidth for even-hole-free graphs." Submitted, July 2023. [arxiv]

[19] **T. Abrishami**, M. Chudnovsky, and Y. Tang. "Even pairs in Berge graphs with no balanced skew-partitions." Submitted, May 2023. [arxiv]