

# SEPEHR HAJEBI

Publications (February 23, 2024)

✉ shajebi@uwaterloo.ca | ✉ sepehr.hajebi@gmail.com | 🌐 sepehrhajebi.com

All manuscripts available at [http://arxiv.org/a/hajebi\\_s\\_1](http://arxiv.org/a/hajebi_s_1).

► PUBLISHED (9):

23. **Hitting all maximum stable sets in  $P_5$ -free graphs**  
J. Comb. Theory Ser. B 165 (2024)  
with Y. Li and S. Spirkl.
22. **Induced subgraphs and tree decompositions**  
**VII. Basic obstructions in  $H$ -free graphs**  
J. Comb. Theory Ser. B 164 (2024)  
with T. Abrishami, B. Alecu, M. Chudnovsky and S. Spirkl.
21. **Induced subgraphs and tree decompositions**  
**II. Toward walls and their line graphs in graphs of bounded degree**  
J. Comb. Theory Ser. B 164 (2024)  
with T. Abrishami, M. Chudnovsky, C. Dibek, P. Rzażewski, S. Spirkl and K. Vušković.
20. **Induced subgraphs and tree decompositions**  
**V. One neighbor in a hole**  
J. Graph Theory (2023)  
with T. Abrishami, B. Alecu, M. Chudnovsky, S. Spirkl and K. Vušković.
19. **Induced subgraphs and tree decompositions**  
**IV. (Even hole, diamond, pyramid)-free graphs**  
Electron. J. Comb 30(2) (2023)  
with T. Abrishami, M. Chudnovsky and S. Spirkl.
18. **Induced subgraphs and tree decompositions**  
**III. Three-path-configurations and logarithmic treewidth**  
Advances in Combinatorics (6) (2022)  
with T. Abrishami, M. Chudnovsky and S. Spirkl.
17. **Complexity dichotomy for List-5-Coloring with a forbidden induced subgraph**  
SIAM J. Discrete Math 256(6) (2022)  
with Y. Li and S. Spirkl.
16. **Minimal induced subgraphs of two classes of 2-connected non-Hamiltonian graphs**  
Discrete Math. 345(7) (2022)  
with J. Cheriyan, Z. Qu and S. Spirkl.

15. **Edge clique cover of claw-free graphs**  
 J. Graph Theory 90(3) (2019)  
 with R. Javadi.  
 ► ACCEPTED OR IN REVISION (4):
14. **List- $k$ -Coloring  $H$ -free graphs for all  $k > 4$**   
 Combinatorica (in revision)  
 arxiv:2311.05713 (2023)  
 with M. Chudnovsky and S. Spirkl.
13. **Tree independence number**  
**I. (Even hole, diamond, pyramid)-free graphs**  
 J. Graph Theory (accepted)  
 arXiv:2305.16258 (2023)  
 with T. Abrishami, B. Alecu, M. Chudnovsky, S. Spirkl and K. Vušković.
12. **List-3-Coloring ordered graphs with a forbidden induced subgraph**  
 SIAM J. Discrete Math (accepted)  
 arXiv:2206.06543 (2022)  
 with Y. Li and S. Spirkl.
11. **Induced subgraphs and tree decompositions**  
**VIII. Excluding a forest in (theta, prism)-free graphs**  
 Combinatorica (in revision)  
 arXiv:2301.02138 (2023)  
 with T. Abrishami, B. Alecu, M. Chudnovsky and S. Spirkl.  
 ► (TO BE) SUBMITTED (10):
10. **Induced subgraphs and tree decompositions**  
**XV. Even-hole-free graphs of bounded clique number have logarithmic treewidth**  
 arxiv:2402.14211 (2024)  
 with M. Chudnovsky, P. Gartland, D. Lokshtanov and S. Spirkl.
9. **Chordal graphs, even-hole-free graphs and sparse obstructions to bounded treewidth**  
 arxiv:2401.01299 (2024)  
 solo paper.
8. **Induced subgraphs and tree decompositions**  
**XIV. Non-adjacent neighbors in a hole**  
 arxiv:2311.05719 (2023)  
 with M. Chudnovsky and S. Spirkl.
7. **Induced subgraphs and tree decompositions**  
**XIII. Basic obstruction in  $\mathcal{H}$ -free graphs for finite  $\mathcal{H}$**   
 arxiv:2311.05066 (2023)  
 with B. Alecu, M. Chudnovsky and S. Spirkl.

6. **Induced subgraphs and tree decompositions**  
**XII. Grid Theorem for pinched graphs**  
arXiv:2309.12227 (2023)  
with B. Alecu, M. Chudnovsky and S. Spirkl.
  5. **Induced subgraphs and tree decompositions**  
**XI. Local structure in even-hole-free graphs of large treewidth**  
arXiv:2205.04420 (2023)  
with B. Alecu, M. Chudnovsky and S. Spirkl.
  4. **Induced subdivisions with pinned branch vertices**  
arXiv:2308.01502 (2023)  
solo paper.
  3. **Induced subgraphs and tree decompositions**  
**X. Towards logarithmic treewidth for even-hole-free graphs**  
arXiv:2307.13684 (2023)  
with T. Abrishami, B. Alecu, M. Chudnovsky and S. Spirkl.
  2. **Induced subgraphs and tree decompositions**  
**IX. Grid theorem for perforated graphs**  
arXiv:2305.15615 (2023)  
with B. Alecu, M. Chudnovsky and S. Spirkl.
  1. **Induced subgraphs and tree decompositions**  
**VI. Graphs with 2-cutsets**  
arXiv:2207.05538 (2022)  
with T. Abrishami, B. Alecu, M. Chudnovsky and S. Spirkl.
- UPCOMING:
- 1. **Tree independence number**  
**II. Three-path-configurations**  
with M. Chudnovsky, D. Lokshtanov and S. Spirkl.