

# SEPEHR HAJEBI

Publications (May 27, 2024)

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## ► PUBLISHED (13):

24. List- $k$ -Coloring  $H$ -free graphs for all  $k > 4$   
[Combinatorica \(2024\)](#)  
with *M. Chudnovsky and S. Spirkl*.
23. Tree independence number  
I. (Even hole, diamond, pyramid)-free graphs  
[J. Graph Theory \(2024\)](#)  
with *T. Abrishami, B. Alecu, M. Chudnovsky, S. Spirkl and K. Vušković*.
22. Induced subgraphs and tree decompositions  
VIII. Excluding a forest in (theta, prism)-free graphs  
[Combinatorica \(2024\)](#)  
with *T. Abrishami, B. Alecu, M. Chudnovsky and S. Spirkl*.
21. List-3-Coloring ordered graphs with a forbidden induced subgraph  
[SIAM J. Discrete Math 38\(1\) \(2024\)](#)  
with *Y. Li and S. Spirkl*.
20. Hitting all maximum stable sets in  $P_5$ -free graphs  
[J. Comb. Theory Ser. B 165 \(2024\)](#)  
with *Y. Li and S. Spirkl*.
19. 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*.
18. 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*.
17. 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*.
16. 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*.

15. 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.
14. Complexity dichotomy for List-5-Coloring with a forbidden induced subgraph  
[SIAM J. Discrete Math](#) 256(6) (2022)  
 with Y. Li and S. Spirkl.
13. 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.
12. Edge clique cover of claw-free graphs  
[J. Graph Theory](#) 90(3) (2019)  
 with R. Javadi.
- SUBMITTED (11):
11. Tree independence number  
 II. Three-path-configurations  
[arxiv:2405.00265](#) (2024)  
 with M. Chudnovsky, D. Lokshtanov and S. Spirkl.
10. Induced subgraphs and tree decompositions  
 XV. Even-hole-free graphs with 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  
 III. Even-hole-free graphs  
*with M. Chudnovsky, D. Lokshtanov and S. Spirkl.*
  - 2. Tree independence number  
 IV. Excluding a star in (theta, prism)-free graphs  
*with M. Chudnovsky, S. Spirkl and N. Trotignon.*
  - 3. Induced subgraphs and tree decompositions  
 XVI. Grid Theorem for constellations  
*with M. Chudnovsky and S. Spirkl.*
  - 4. Induced subgraphs and tree decompositions  
 XVII. Complete bipartite induced minors  
*with M. Chudnovsky and S. Spirkl.*
  - 5. Induced subgraphs and tree decompositions  
 XVIII. Anticomplete induced subgraphs of large treewidth  
*with M. Chudnovsky and S. Spirkl.*