

## Publications and Preprints

Maria Chudnovsky

### Journal papers published

1. Four-coloring  $P_6$ -free graphs I. Extending an excellent precoloring. (with S. Spirkl and M. Zhong), *SIAM Journal on Computing*, 53 (2024), 10.1137/18M1234837
2. Four-coloring  $P_6$ -free graphs II. Finding an excellent precoloring. (with S. Spirkl and M. Zhong), *SIAM Journal on Computing*, 53 (2024), 10.1137/18M1234849
3. Induced subgraphs and tree-decompositions V. At most one neighbor in a hole. (with Tara Abrishami, Bogdan Alecu, Sepehr Hajebi, Sophie Spirkl and Kristina Vuskovic), *Journal of Graph Theory*, 105 (2024), 542-561.
4. Induced subgraphs and tree-decompositions VII. Basic obstructions in  $H$ -free graphs (with Tara Abrishami, Bogdan Alecu, Sepehr Hajebi, and Sophie Spirkl), *Journal of Combinatorial Theory, Series B*, 164 (2024), 443-472.
5. Induced subgraphs and tree-decompositions II. Toward walls and their line graphs in graphs of bounded degree. (with Tara Abrishami, Cemil Dibek, Sepehr Hajebi, Pawel Rzazewski, Sophie Spirkl and Kristina Vuskovic), *Journal of Combinatorial Theory, Series B*, 164 (2024), 371-403.
6. Characterizing and generalizing cycle completable graphs, (with Ian Malcolm Johnson), *Discrete Mathematics*, 347 (2024), 113754.
7. Bipartite graphs with no  $K_6$ -minor, (with A. Scott, P. Seymour and S.Spirkl), *Journal of Combinatorial Theory, Series B*, 164 (2024), 68-104.
8. Non-uniform degrees and rainbow versions of the Caccetta-Haggkvist conjecture, with Ron Aharoni, Eli Berger, He Guo and Shira Zerbib, *SIDMA*, 37 (2023), 1704 - 1714.
9. Complexity of  $C_k$ -coloring in hereditary classes of graphs, (with S. Huang, P. Rzazewski, S.Spirkl and M. Zhong), *Information and Computation*, 292 (2023), Artidce 105015.
10. Attempting perfect hypergraphs, (with Gil Kalai) *Israel J. of Math*, 256 (2023), 133-151.
11. Polynomial bounds for chromatic number. VII. Disjoint holes (with Alex Scott, Paul Seymour and Sophie Spirkl) *Journal of Graph Theory*, 104 (2023), 499-515.
12. Strengthening Rodl's theorem, (with Alex Scott, Paul Seymour and Sophie Spirkl), *Journal of Combinatorial Theory, Series B*, 163 (2023), 256-271.
13. Pure Pairs X. Excluding six-vertex tournaments, (with Alex Scott, Paul Seymour and Sophie Spirkl), *European Journal of Combinatorics*, 115 (2024), 103786
14. Induced subgraphs and tree-decompositions IV. (Even hole, diamond, pyramid)-free graphs (with Tara Abrishami, Sepehr Hajebi, and Sophie Spirkl), *Electronic Journal of Combinatorics*, 30 (2023), P2.42

15. Proof of a conjecture of Plummer and Zha, (*with* Paul Seymour) *J. Graph Theory*, 103 (2023), 437-450
16. Erdős-Hajnal for graphs with no 5-hole, (*with* Alex Scott, Paul Seymour and Sophie Spirkl), *Proceedings of the London Mathematical Society*, 126 (2023), 997-1014
17. Stable sets in flag spheres, (*with* Eran Nevo), *European Journal of Combinatorics*, 110 (2023), 103699
18. Polynomial bounds for chromatic number. VI. Adding a four vertex path (*with* Alex Scott, Paul Seymour and Sophie Spirkl), *European Journal of Combinatorics*, 110 (2023), 103710
19. Even-hole -free graphs still have bisimplicial vertices, (*with* Paul Seymour), *Journal of Combinatorial Theory, Series B*, 161 (2023), 331-381
20. Induced subgraphs and tree-decompositions III. Three-path-configurations and logarithmic tree-width, (*with* Tara Abrishami, Sepehr Hajebi and Sophie Spirkl), *Advances in Combinatorics* (2022)
21. Concatenating bipartite graphs. (*with* P. Hompe, A. Scott, P. Seymour and S. Spirkl) *Electronic J Combinatorics* 29 (2022), P2.47
22. Forbidden induced pairs for perfectness and  $w$ -colorability of graphs, (*with* A. Kabela, B. Li and P. Vrana), *Electronic J. Combinatorics*, 29 (2022), P2.21
23. Rainbow paths and large rainbow matchings, (*with* R. Aharoni, E. Berger and S. Zerbib), *Electronic J. Combinatorics*, 29(2022), P1.10
24. Induced subgraphs and tree-decompositions I. Even-hole-free graphs of bounded degree, (*with* T. Abrishami and K. Vuskovic), *JCT B*, 157 (2022), 144-175.
25. Tournaments and the Strong Erdős-Hajnal property, (*with* E. Berger, K. Choromanski and S. Zerbib), *European Journal of Combinatorics*, 100 (2022), 103440
26. Avoidable vertices and edges in graphs, (*with* J. Beisegel, V. Gurvich, M. Milanic and M. Servatius), *Discrete Applied Math*, 309 (2022), 285-300.
27. Graphs with polynomially many minimal separators, (*with* Tara Abrishami, Cemil Dibek, Stephan Thomasse, Nicolas Trotignon and Kristina Vuskovic), *JCT B*, 152 (2022), 248-280.
28. Erdős-Hajnal for cap-free graphs, (*with* Paul Seymour), *JCT B*, 151 (2021), 417-434.

29. Finding large  $H$ -colorable subgraphs in hereditary graph classes, (*with* J. King, Mihal Pilipczuk, P. Rzazewski and S. Spirkl), *SIDMA*, 35 (2021), 2357-2386.
30. Induced subgraphs of graphs with large chromatic number V. Chandaliers and strings, (*with* Alex Scott and Paul Seymour), *JCT B*, 150 (2021), 195-243.
31. Pure pairs II. Excluding all subdivisions of a graph. (*with* A. Scott, P. Seymour and S. Spirkl), *Combinatorica*, 41 (2021), 379-405.
32. A note on simplicial cliques, (*with* Alex Scott, Paul Seymour and Sophie Spirkl), *Discrete Math*, 344 (2021), 112470.
33. New examples of minimal non-strongly-perfect graphs (*with* C. Dibek and P. Seymour), *Discrete Math*, 334 (2021), 112334.
34. Finding a shortest odd hole (*with* A. Scott and P. Seymour), *ACM Transactions on Algorithms*, 17 (2021), 1-21.
35. Detecting long odd hole (*with* A. Scott and P. Seymour), *Combinatorica*, 41 (2021), 1-30.
36. Square-free graphs with no induced fork (*with* S. Huang, T. Karthick and J. Kaufmann), *Electronic Journal of Combinatorics*, 28 (2021).
37. Strongly perfect claw-free graphs—a short proof (*with* Cemil Dibek), *Journal of Graph Theory*, 97 (2021), 359-381.
38. Better 3-coloring algorithms: excluding a triangle and a seven vertex path, (*with* F. Bonomo, J. Goedgebeuer, P. Maceli, O. Schaudt, M. Stein and M. Zhong), *Theoretical Computer Science*, 850 (2021), 98-115.
39. Pure pairs I. Trees and linear anticomplete pairs. (*with* A. Scott, P. Seymour and S. Spirkl), *Advances in Mathematics*, 375 (2020), 107396.
40. List-three-coloring  $P_t$ -free graphs with no induced 1-subdivision of  $K_{1,s}$ , (*with* Sophie Spirkl and Mingxian Zhong), *Discrete Math*, 343 (2020), 112086.
41. 3-coloring graphs with no  $P_6 + rP_3$ , (*with* S. Huang, S. Spirkl and M. Zhong), *Algorithmica* (2020).
42. On maximum weight independent sets in graphs with no induced cycle of length at least five, (*with* M. Pilipczuk, M. Pilipczuk and S. Thomasse), *SIDMA*, 34 (2020), 1472-1483.

43. Subdivided claws and the clique-stable set separation problem (*with P. Seymour*), in *D. Wood, J. de Gier, C. Praeger, T. Tao (eds) 2019-2020 MATRIX Annals, Springer, 2020.*
44. Proof of the Kalai-Meshulam conjecture. (*with A. Scott, P. Seymour and S. Spirkl*) *Israel Journal of Math*, 238 (2020), 639–661
45. Induced equators in flag spheres, (*with Eran Nevo*) *Journal of Combinatorial Theory, Ser. A*, 176 (2020), 105283
46. Coloring graphs with no induced five-vertex path or gem (*with T. Karthick, P. Maceli and F. Maffray*) *Journal of Graph Theory*, 95 (2020), 527-542.  
[https : //doi.org/10.1002/jgt.22572](https://doi.org/10.1002/jgt.22572)
47. Pure pairs III. Sparse graphs with no polynomial-size anticomplete pairs. (*with J. Fox, A. Scott, P. Seymour and S.Spirkl*), *Journal of Graph Theory*, 95 (2020), 315-340.
48. Excluding the fork and antifork (*with L. Cook and P. Seymour*), *Discrete Mathematics*, 343 (2020), Article 111786,
49. Detecting an odd hole, (*with Alex Scott, Paul Seymour and Sophie Spirkl*), *JACM* 67 (2020), Article 5,  
[https : //doi.org/10.1145/3375720](https://doi.org/10.1145/3375720)
50. Cooperative colorings of trees and of bipartite graphs. (*with Ron Aharoni, Eli Berger, Frederic Havet and Zilin Jiang*), *Electronic Journal of Combinatorics* 27 (2020) P1.41
51. Obstructions to three-coloring and list-three-coloring  $H$ -free graphs, (*with J. Goedgebeur, O. Schaudt and M. Zhong*), *SIDMA*, 34 (2020), 431-469.
52. Induced subgraphs of graphs with large chromatic number VIII. Long odd holes, (*with A. Scott, P. Seymour and S. Spirkl*), *Journal of Combinatorial Theory, Ser. B*, 140 (2020), 84-97
53. Obstructions for three-coloring graphs with no induced paths on six vertices(*with J. Goedgebeur, O.Schaudt and M. Zhong*), *Journal of Combinatorial Theory, Ser. B*, 140 (2020), 45-83
54. Approximately coloring graphs without long induced paths, (*with O. Schaudt, S. Spirkl, M. Stein and M. Zhong*), *Algorithmica*, 81 (2019). 3186-3199
55. Induced subgraphs of graphs with large chromatic number. XII. Distant Stars. (*with A. Scott and P. Seymour*), *Journal of Graph Theory*, 92 (2019), 237-254.

56. Towards Erdős-Hajnal for graphs with no 5-hole. (*with* Jacob Fox, Alex Scott, Paul Seymour and Sophie Spirkl), *Combinatorica*, 39 (2019), 983-991
57. Disjoint paths in unions of tournaments. (*with* Alex Scott and Paul Seymour), *Journal of Combinatorial Theory*, 135 (2019), 96-129
58. Large rainbow matchings in general graphs, (*with* R. Aharoni, E. Berger, D. Howard and P. Seymour), *European Journal of Combinatorics*, 79 (2019) 222-227
59.  $\{ISK_4, \text{triangle}\}$ -free graphs are 3-colorable, (*with* C.-H. Lui, O. Schaudt, S. Spirkl, N. Trotignon, and K. Vuskovic), *Journal of Graph Theory*, 92 (2019), 67-95
60. Coloring square-free Berge graphs (*with* F. Maffray, I. Lo, N. Trotignon and K. Vuskovic), *Journal of Combinatorial Theory, Ser. B* 135 (2019), 96-128.
61. Induced subgraphs of graphs with large chromatic number XI. Orientations. (*with* A. Scott and P. Seymour), *European Journal of Combinatorics*, 76 (2019) 53-61.
62. On the Erdős-Hajnal Conjecture for six-vertex tournaments. (*with* E. Berger and K. Choromanski), *European Journal of Combinatorics*, 75 (2019) 113-122.
63. Vertex-minors and the Erdős-Hajnal conjecture. (*with* Sang-il Oum), *Discrete Math* 341 (2018) 3498-3499.
64. Triangle-free graphs with no six-vertex induced path. (*with* P. Seymour, S. Spirkl and M. Zhong), *Discrete Math*, 341 (2018) 2179-2196
65. Perfect divisibility and 2-divisibility, (*with* Vaidy Sivaraman) *Journal of Graph Theory*, 90 (2018), 54-60.
66. 3-colorable subclasses of  $P_8$ -free graphs, (*with* Juraj Stacho), *SIDMA*, 32 (2018), 1111-1138
67. Piercing axes-parallel boxes. (*with* Sophie Spirkl and Shira Zerbib) *Electronic Journal of Combinatorics* 25 (2018) #P1.70
68. The sandwich problem for decompositions and almost monotone properties, (*with* C.M.H. de Figueiredo and S. Spirkl), *Algorithmica* 12 (2018), 3618-3645.
69. Even pairs and prism corners in Berge graphs, (*with* F. Maffray, P. Seymour and S. Spirkl), *JCT B*, 131 (2018), 12-39 with a corrigendum *JCT B*, 133 (2018) 259-260.
70. Odd-holes in bull-free graphs. (*with* Vaidy Sivaraman) *SIDMA*, 32 (2018), 951-955
71. A Short Proof of the Wonderful Lemma, *Journal of Graph Theory*, 87 (2018), 271-274

72. Domination in tournaments (*with* R. Kim, C.-H. Liu, P. Seymour and S. Thomasse), *Journal of Combinatorial Theory, Ser. B* 130 (2018), 98-113.
73. Three-coloring and list three-coloring of graphs without induced paths on seven vertices (*with* F. Bonomo, P. Maceli, O. Schaudt, M. Stein and M. Zhong), *Combinatorica* 38 (2018) 779-801.
74. Fair representations by independent sets, (*with* R. Aharoni, N. Alon, E. Berger, D. Kotlar, M. Loeb and R. Ziv), *In: Loeb M., Nešetřil J., Thomas R. (eds) A Journey Through Discrete Mathematics. Springer, 31-58.*
75. Induced subgraphs of graphs with large chromatic number III. Long holes, (*with* Alex Scott and Paul Seymour), *Combinatorica*, 37 (2017), 1057-1072
76. Decomposing and clique-coloring (Diamond, Odd-hole)-free graphs (*with* Irene Lo), *Journal of Graph Theory*, 86 (2017), 5-41
77. 4-coloring  $P_6$ -free graphs with no induced 5-cycles. (*with* Peter Maceli, Juraj Stacho and Mingxian Zhong), *Journal of Graph Theory*, 84 (2017), 262-285
78. Graphs with no induced five-vertex path or antipath, (*with* L. Esperet, L. Lemoine, P. Maceli, F. Maffray and I. Penev), *Journal of Graph Theory*, 84 (2017), 221-232
79. Coloring perfect graphs with bounded clique number, (*with* A. Lagoutte, P. Seymour, S. Spirkl), *Journal of Combinatorial Theory, Ser B* 122 (2017), 757-775
80. Disjoint dijoins (*with* Katherine Edwards, Ringi Kim, Alex Scott and Paul Seymour), *Journal of Combinatorial Theory, Ser B* 120 (2016), 18-35
81. Unavoidable induced subgraphs in large graphs with no homogeneous sets (*with* R. Kim, S. Oum and P. Seymour), *Journal of Combinatorial Theory, Ser. B*, 118 (2016), 1-12
82. Induced subgraphs of graphs with large chromatic number II. Three steps towards Gyárfas's conjecture, (*with* Alex Scott and Paul Seymour), *Journal of Combinatorial Theory, Ser B*, 118 (2016), 109-128
83. Bipartite minors (*with* Gil Kalai, Eran Nevo, Isabella Novik and Paul Seymour), *Journal of Combinatorial Theory, Ser B* 116 (2016), 219-228
84. Immersion in four-edge-connected graphs, (*with* Zdenek Dvorak, Tereza Klimosova, Paul Seymour), *Journal of Combinatorial Theory, Ser B* 116 (2016), 208-218

85. A De Bruijn–Erdős theorem for chordal graphs (*with* Laurent Beaudou, Adrian Bondy, Xiaomin Chen, Ehsan Chiniforooshan, Vašek Chvátal, Nicolas Fraiman, Yori Zwols), *Electronic Journal of Combinatorics*, 22 (2015), 1.70
86. Excluding paths and antipaths (*with* Paul Seymour), *Combinatorica*, 35 (2015), 389–412.
87. Edge-coloring 7-regular planar graphs (*with* Katherine Edwards, Ken-ichi Kawarabayashi and Paul Seymour), *Journal of Combinatorial Theory, Ser B* 115 (2015), 276–302.
88. Edge-coloring 8-regular planar graphs (*with* Katherine Edwards and Paul Seymour), *Journal of Combinatorial Theory, Ser B* 115 (2015), 303–338.
89. Coloring perfect graphs with no balanced skew-partitions (*with* Nicolas Trotignon, Théophile Trunck and Kristina Vusković), *Journal of Combinatorial Theory, Ser B* 115 (2015), 26–65.
90. Cliques in the union of graphs (*with* Ron Aharoni, Eli Berger and Juba Ziani), *Journal of Combinatorial Theory, Ser B* 114 (2015), 170–186.
91. Forcing large transitive subtournaments (*with* Eli Berger and Krzysztof Choromanski), *Journal of Combinatorial Theory, Ser B* 113 (2015), 1–17.
92. Disjoint paths in tournaments (*with* Alex Scott and Paul Seymour), *Advances in Mathematics*, 270 (2015), 582–597.
93. Wheel-free planar graphs (*with* Pierre Aboulker, Paul Seymour and Nicolas Trotignon), *European Journal of Combinatorics* (2015), pp. 57–67
94. Excluding a substar and an antistar (*with* Sergey Norin, Bruce Reed and Paul Seymour), *SIDMA*, 29 (2015), 297–308
95. Simplicial vertices in graphs with no induced four-edge path or four-edge antipath, and the  $H_6$ -conjecture (*with* Peter Maceli), *Journal of Graph Theory*, 76 (2014), 249–261.
96. Coloring graphs with forbidden induced subgraphs, *Proceedings of the ICM, 2014*, 291–302.
97. Tournaments with near-linear transitive subsets, (*with* Krzysztof Choromanski and Paul Seymour), *Journal of Combinatorial Theory, Ser B* 109 (2014), 228–249.
98. Large cliques and stable sets in undirected graphs, *in Geometry, Structure and Randomness in Combinatorics, Publications of the Scuola Normale Superiore / CRM Series*, (eds: J. Matousek, J. Nešetřil and M. Pellegrini), Edizioni della Normale

99. Excluding pairs of graphs (*with* Alex Scott and Paul Seymour), *Journal of Combinatorial Theory, Ser B*, 106(2014), 15-29
100. Lines in hypergraphs (*with* Laurent Beaudou, Adrian Bondy, Xiaomin Chen, Ehsan Chiniforooshan, Vašek Chvátal, Nicolas Fraiman, Yori Zwols), *Combinatorica*, 33 (2013), 633-654
101. The Erdős-Hajnal conjecture—A Survey, *Journal of Graph Theory*, 75 (2014), 178-190
102. The structure of claw-free perfect graphs (*with* with Matthieu Plumettaz), *Journal of Graph Theory*, 75 (2014), 203-230
103. Rao's conjecture on degree sequences (*with* Paul Seymour), *Journal of Combinatorial Theory, Ser. B* , 105 (2014), 44-92
104. Extending the Gyárfás-Sumner conjecture (*with* Paul Seymour), *Journal of Combinatorial Theory, Ser. B* , 105 (2014), 11-16
105. Detecting an induced net subdivision (*with* Paul Seymour and Nicolas Trotignon), *Journal of Combinatorial Theory, Ser. B* , 103 (2013), 630-641
106. Substitutions and  $\chi$ -boundedness (*with* Irena Penev, Alex Scott and Nicolas Trotignon), *Journal of Combinatorial Theory, Ser. B* , 103 (2013), 567-586
107. The structure of bull-free perfect graphs (*with* Irena Penev), *Journal of Graph Theory*, 74 (2013), 1-31
108. A counterexample to a conjecture of Schwartz (*with* Felix Brandt, Ilhee Kim, Gaku Liu, Sergey Norin, Alex Scott, Paul Seymour and Stephan Thomasse ) *Social Choice and Welfare*, 40 (2013), 739-743
109. A local strengthening of Reed's  $\omega$ ,  $\Delta$ , and  $\chi$  conjecture for quasi-line graphs (*with* Andrew King, Matthieu Plumettaz and Paul Seymour), *SIDMA*, 27 (2013), 95-108
110. Finding minimum clique capacity (*with* Sang-il Oum and Paul Seymour) *Combinatorica*, 32 (2012), 283-287
111. Packing seagulls (*with* Paul Seymour) *Combinatorica*, 32 (2012), 251-282
112. Clawfree Graphs VII. Quasi-line graphs (*with* Paul Seymour) *Journal of Combinatorial Theory, Ser. B* , 102 (2012), 1267-1294
113. Growing without cloning (*with* Paul Seymour), *SIDMA*, 26 (2012), 860-880



114. Tournaments and coloring (*with* Eli Berger, Krzysztof Choromanski, Jacob Fox, Martin Loeb, Alex Scott, Paul Seymour and Stephan Thomassé), *Journal of Combinatorial Theory, Ser. B*, 103 (2013), 1-20
115. Perfect matchings in planar cubic graphs (*with* Paul Seymour) *Combinatorica*, 32 (2012), 403-424
116. Large cliques or stable sets in graphs with no four-edge path and no five-edge path in the complement (*with* Yori Zwols), *Journal of Graph Theory*, 70 (2012), 449 - 472
117. Excluding induced subdivisions of the bull and related graphs (*with* Irena Penev, Alex Scott and Nicolas Trotignon), *Journal of Graph Theory*, 71 (2012), 49 - 68
118. Tournament immersion and cutwidth (*with* Alexandra Fradkin and Paul Seymour) *Journal of Combinatorial Theory. Ser B*, 102 (2012), 93-101
119. Three-colorable perfect graphs without even pairs (*with* Paul Seymour) *Journal of Combinatorial Theory. Ser B*, 102 (2012), 363-394
120. Analyzing the performance of greedy maximal scheduling via local pooling and graph theory (*with* Berk Birand, Bernard Ries, Paul Seymour, Gil Zussman and Yori Zwols), *IEEE/ACM Trans. Netw.* 20 (2012), 163–176.
121. The structure of bull-free graphs I — Three-edge-paths with center and anticenters *Journal of Combinatorial Theory. Ser B*, 102 (2012), 233-251
122. The structure of bull-free graphs II and III—a summary, *Journal of Combinatorial Theory. Ser B*, 102 (2012), pp. 252-282
123. Claw-free graphs with strongly perfect complements. Fractional and integral version. Part I. Basic graph (*with* Bernard Ries and Yori Zwols) *Discrete Applied Math*, 159(2011), 1971-1995
124. Claw-free graphs with strongly perfect complements. Fractional and integral version. Part II. Nontrivial strip structures (*with* Bernard Ries and Yori Zwols) *Discrete Applied Math*, 159(2011), 1996-2029
125. Edge density for  $K_{2,t}$  minors (*with* Bruce Reed and Paul Seymour) *Journal of Combinatorial Theory. Ser B*, 101 (2011), 18-46
126. Hadwiger's conjecture and seagull packing, *Notices Amer. Math. Soc.* 57 (2010), 733–736
127. A well-quasi-order for tournaments (*with* Paul Seymour) *Journal of Combinatorial Theory. Ser B*, 101 (2011), 47-53

128. Clawfree Graphs VI. Coloring claw-free graphs (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, 100 (2010), 560-572
129.  $K_4$ -free graphs with no odd holes (*with N. Robertson, P. Seymour and R. Thomas*) *Journal of Combinatorial Theory. Ser B*, 100 (2010), 313-331
130. The three-in-a-tree problem (*with Paul Seymour*) *Combinatorica*, 30 (2010), 387-417
131. An approximate version of Hadwiger's conjecture for claw-free graphs (*with Alexandra Ovetsky Fradkin*) *Journal of Graph Theory*, 63 (2010) 259-278
132. Partial characterizations of clique-perfect graphs II : diamond-free and Helly circular-arc graphs (*with Flavia Bonomo and Guillermo Durán*) *Discrete Mathematics*, 309 (11) (2009), 3485-3499
133. Even pairs in Berge graphs (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, 99 (2009), 370-377
134. Bisimplicial vertices in even-hole-free graphs (*with L. Addario-Berry, F. Havet, B. Reed and P. Seymour*) *Journal of Combinatorial Theory. Ser B*, 98 (2008), 1119-1164
135. Clawfree Graphs V — Global structure (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, 98 (2008), 1373-1410
136. The Erdos Hajnal Conjecture for bullfree graphs (*with S. Safra*) *Journal of Combinatorial Theory. Ser B*, 98 (2008), 1301-1310
137. Hadwiger's conjecture for quasi-line graphs (*with A. Overtsky Fradkin*) *Journal of Graph Theory* 59 (2008), 17-33
138. Detecting a theta or a prism (*with R. Kapadia*) *SIAM Journal on Discrete Math* 22(2008), 1164-1186
139. An algorithm for packing non-zero  $A$ -paths in group-labeled graphs (*with William H. Cunningham and Jim Geelen*) *Combinatorica* 28(2008), 145-161
140. Cycles in dense digraphs (*with Paul Seymour and Blair Sullivan*) *Combinatorica* 28(2008), 1-18
141. Partial characterizations of clique-perfect graphs I : subclasses of claw-free graphs (*with Flavia Bonomo and Guillermo Durán*) *Discrete Applied Mathematics* 156 (2008), 1058-1082

142. Clawfree Graphs IV — Decomposition theorem (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, 98 (2008), 839-938
143. Solution of three problems of Cornuéjols (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, 98 (2008), 116-135
144. Clawfree Graphs III — Circular interval graphs (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B* 98(2008), 812-834
145. Clawfree Graphs II — Non-orientable prismatic graphs (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, 98 (2008), 249-290
146. Clawfree Graphs I — Orientable prismatic graphs (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, 97 (2007), 867-901
147. Excluding induced subgraphs (*with Paul Seymour*) *Surveys in Combinatorics 2007, London Math Soc Lecture Note Series 346*, 99-119
148. Coloring quasi-line graphs (*with Alexandra Ovetsky*) *Journal of Graph Theory* 54(2007), 41-50
149. The Roots of the Independence Polynomial of a Clawfree Graph (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, 97 (2007), 350-357
150. The Strong Perfect Graph Theorem (*with N.Robertson, P.Seymour, R.Thomas*) *Annals of Math* 164(2006), 51-229
151. Non-zero A-paths in graphs with edges labeled by group elements (*with Jim Geelen, Bert Gerards, Luis Goddyn, Michael Lohman, and Paul Seymour*) *Combinatorica, Ser. B* 26(2006), 521-532
152. Berge Trigraphs *Journal of Graph Theory* 53(2006), 1-55
153. The Structure of Clawfree Graphs (*with Paul Seymour*) *Surveys in Combinatorics 2005, London Math Soc Lecture Note Series 327*, 153-171
154. Partial characterizations of clique-perfect graphs, (*with F. Bonomo, and G.Durán*) *Electronic Notes in Discrete Mathematics* 19(2005), 95-101 (extended abstract)
155. Recognizing Berge Graphs (*with G.Cornuéjols, X.Liu, P.Seymour, K.Vušković*) *Combinatorica* 25(2005), 143-187
156. Detecting Even Holes (*with K. Kawarabayashi, P. Seymour*) *Journal of Graph Theory* 48(2005), 85-111

157. Progress on Perfect Graphs (*with* N.Robertson, P.Seymour, R.Thomas) *Mathematical Programming Ser. B* 97(2003), 405-422
158. Berge Trigraphs and Their Applications, *Ph.D. Thesis, Princeton University, 2003*
159. Triangulated Spheres and Colored Cliques (*with* R. Aharoni, A. Kotlov) *Discrete and Computational Geometry* 28 (2002), 223-229
160. Systems of Disjoint Representatives, *M.Sc. Thesis, The Technion, 1999*

### Conference Proceedings

1. Sparse induced subgraphs in  $P_6$ -free graphs. (*with* Rose McCarty, Marcin Pilipczuk, Mihal Pilipczuk and Pawel Rzazewski) *Proc. SODA'24, 2024*
2. Max weight independent set in sparse graphs with no long claws (*with* Tara Abrishami, Marcin Pilipczuk and Pawel Rzazewski), *Leibniz International Proceedings in Informatics (STAC2024)*.
3. Polynomial-time algorithm for maximum independent set in graphs with no long induced claws (*with* Tara Abrishami, Cemil Dibek and Pawel Rzazewski), *Proc. SODA'22, 2022*
4. Induced subgraphs of bounded treewidth and the container method, (*with* T. Abrishami, M. Pilipczuk, P. Rzazewski and P. Seymour), *Proc. SODA'21, 2021*
5. Finding large  $H$ -colorable subgraphs in hereditary graph classes, (*with* J. King, Mihal Pilipczuk, P. Rzazewski and S. Spirkl), *28th Annual European Symposium on Algorithms, 2020*
6. Quasi-polynomial time approximation schemes for the Maximum Weight Independent Set Problem in  $H$ -free graphs, (*with* Marcin Pillipczuk, Mihal Pillipczuk and Stephan Thomasse), *Proc. SODA'20, 2020*
7. Complexity of  $C_k$ -coloring in hereditary classes of graphs, (*with* S. Huang, P. Rzazewski, S. Spirkl, M. Zhong), *27th Annual European Symposium on Algorithms, 2019*
8. Avoidable vertices and edges in graphs, (*with* J. Beisegel, V. Gurvich, M. Milanic and M. Servatius), *Proc. 16th Algorithms and Data Structures Symposium (WADS 2019) Lecture Notes in Computer Science 11646 (2019) 126-139*
9. Four-coloring  $P_6$ -free graphs (*with* S. Spirkl and M. Zhong), *Proc. SODA'19, 2019*

10. Analyzing the Performance of Greedy Maximal Scheduling via Local Pooling and Graph Theory, (*with* Berk Birand, Bernard. Ries, Paul Seymour, Gil Zussman and Yori Zwols) Proc. IEEE INFOCOM'10, 2010.
11. Obstructions to 3-coloring  $P_6$ -free graphs (*with* J. Goedgebeur, O.Schautdt and M. Zhong), *Proc. SODA'16, 2016*

### **Papers to appear**

1. List- $k$ -coloring  $H$ -free graphs for all  $k > 4$ , (*with* Sepehr Hajebi and Sophie Spirkl), *to appear in Combinatorica*
2. Tree independence number I. (Even hole, diamond, pyramid)-free graphs. (*with* Tara Abrishami, Bogdan Alecu, Sepehr Hajebi, Sophie Spirkl and Kristina Vuskovic), *to appear in Journal of Graph Theory*
3. Induced subgraphs of bounded treewidth and the container method, (*with* T. Abrishami, M. Pilipczuk, P. Rzazewski and P. Seymour), *to appear in SIAM Journal on Computing*
4. Induced subgraphs and tree-decompositions VIII. Excluding a forest in (prism,theta)-free graphs. (*with* Tara Abrishami, Bogdan Alecu, Sepehr Hajebi, and Sophie Spirkl), *to appear in Combinatorica*
5. Submodular functions and perfect graphs, (*with* Tara Abrishami, Cemil Dibek and Kristina Vuskovic), *to appear in Mathematics of Operations Research*
6. Quasi-polynomial time approximation schemes for the Maximum Weight Independent Set Problem in  $H$ -free graphs, (*with* Marcin Pillipczuk, Mihal Pillipczuk and Stephan Thomasse), *to appear in SIAM Journal on Computing*

### **Papers submitted for publication**

1. Sparse induced subgraphs in  $P_6$ -free graphs. (*with* Rose McCarty, Marcin Pilipczuk, Mihal Pilipczuk and Pawel Rzazewski) *submitted for publication*
2. Even pairs in graphs with no balanced skew-partitions, (*with* Tara Abrishami and Yaqian Tang) *submitted for publicaton*
3. Max Weight Independent Set in sparse graphs with no long claws, (*with* T. Abrishami, C. Dibek, M. Pilipczuk and P. Rzazewski) *submitted for publication*

4. On prime Cayley graphs, (*with* M. Cizek, L. Crew, J. Minac, T.T. Nguyen, S. Spirkl, and N. D. Tan) *submitted for publication*
5. The structure of metrizable graphs, (*with* Danile Cizma and Nati Linial), *submitted for publication*
6. Induced subgraphs and tree-decompositions XIV. Non-adjacent neighbors in a hole. (*with* Sepehr Hajebi and Sophie Spirkl), *submitted for publication*
7. Induced subgraphs and tree-decompositions XIII. Basic obstructions in  $\mathcal{H}$ -free graphs for finite  $\mathcal{H}$ . (*with* Bogdan Alecu, Sepehr Hajebi and Sophie Spirkl), *submitted for publication*
8. Reuniting  $\chi$ -boundedness with polynomial  $\chi$ -boundedness, (*with* Linda Cook, James Davies and Sang-il Oum), *submitted for publication*
9. Graphs with no even holes and no sector wheels are the union of two chordal graphs (*with* Tara Abrishami, Eli Berger and Shira Zerbib), *submitted for publication*
10. Induced subgraphs and tree-decompositions XII. Grid theorem for pinched graphs (*with* Bogdan Alecu, Sepehr Hajebi and Sophie Spirkl), *submitted for publication*
11. Induced subgraphs and tree-decompositions XI. Local structure in even-hole-free graphs of large treewidth. (*with* Bogdan Alecu, Sepehr Hajebi and Sophie Spirkl), *submitted for publication*
12. Induced subgraphs and tree-decompositions X. Towards logarithmic treewidth in even hole free graphs. (*with* Tara Abrishami, Bogdan Alecu, Sepehr Hajebi, and Sophie Spirkl), *submitted for publication*
13. Induced subgraphs and tree-decompositions IX. Grid theorem for perforated graphs (*with* Bogdan Alecu, Sepehr Hajebi and Sophie Spirkl), *submitted for publication*
14. Cops and robbers in  $P_5$ -free graphs. (*with* Sergey Norin, Paul Seymour and Jeremie Turcotte), *submitted for publication*
15. Induced subgraphs and tree-decompositions VI. Graphs with 2-cutsets. (*with* Tara Abrishami, Sepehr Hajebi, and Sophie Spirkl), *submitted for publication*

**Manuscripts not yet submitted and papers in preparation**

1. Induced subgraphs and tree-decompositions XVI. Anticomplete induced subgraphs of large treewidth. (*with* Sepehr Hajebi and Sophie Spirkl), *in preparation*

2. Tree independence number IV. Thetas, prisms and stars. (*with* Sepehr Hajebi, Sophie Spirkl and Nicolas Trotignon), *in preparation*
3. Tree independence number III. Even-hole-free graphs. (*with* Peter Gartland, Sepehr Hajebi, Daniel Lokshtanov and Sophie Spirkl), *in preparation*
4. Induced minors and tree-independence number, (*with* M. Hatzel, T. Korhonen, N. Trotignon, and S. Wiederrech), *in preparation*
5. Tree independence number II. 3PC-free graphs. (*with* Sepehr Hajebi, Daniel Lokshtanov and Sophie Spirkl), *in preparation*
6. Induced subgraphs and tree-decompositions XV. Even-hole-free graphs with bounded clique number have logarithmic treewidth. (*with* Peter Gartland, Sepehr Hajebi, Daniel Lokshtanov and Sophie Spirkl), *manuscript*
7. Maximum independent sets in (pyramid, even hole)-free graphs, (*with* Stephan Thomasse, Nicolas Trotignon and Kristina Vuskovic), *manuscript*
8. Small families under subdivision, (*with* M. Loebel and P. Seymour), *manuscript*
9. Optimal anti-thickenings of claw-free graphs (*with* Andrew King), *manuscript*
10. On the Erdős-Lovász Tihany Conjecture in claw-free graphs, (*with* Alexandra Fradkin and Matthieu Plumettaz), *manuscript*