

Publications and Preprints

Maria Chudnovsky

Journal papers published

1. Tournament immersion and cutwidth (*with* Alexandra Fradkin and Paul Seymour) *Journal of Combinatorial Theory. Ser B, Vol. 102 (2012), 93-101*
2. Three-colorable perfect graphs without even pairs (*with* Paul Seymour) *Journal of Combinatorial Theory. Ser B, Vol. 102 (2012), 363-394*
3. Analyzing the performance of greedy maximal scheduling via local pooling and graph theory (*with* Berk Birand, Paul Seymour, Bernard Ries, Gil Zussman and Yori Zwols), *IEEE/ACM Trans. Netw.* 20 (2012), 163–176.
4. The structure of bull-free graphs I — Three-edge-paths with center and anticenters *Journal of Combinatorial Theory. Ser B, Vol. 102 (2012), 233-251*
5. The structure of bull-free graphs II and III—a summary, *Journal of Combinatorial Theory. Ser B, Vol. 102 (2012), pp. 252-282*
6. Claw-free graphs with strongly perfect complements. Fractional and integral version. Part I. Basic graph (*with* Bernard Ries and Yori Zwols) *Discrete Applied Math, Vol 159(2011), 1971-1995*
7. 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, Vol 159(2011), 1996-2029*
8. Edge density for $K_{2,t}$ minors (*with* Bruce Reed and Paul Seymour) *Journal of Combinatorial Theory. Ser B, Vol. 101 (2011), 18-46*
9. A well-quasi-order for tournaments (*with* Paul Seymour) *Journal of Combinatorial Theory. Ser B, Vol. 101 (2011), 47-53*
10. Clawfree Graphs VI. Coloring claw-free graphs (*with* Paul Seymour) *Journal of Combinatorial Theory. Ser B, Vol. 100 (2010), 560-572*
11. K_4 -free graphs with no odd holes (*with* N. Robertson, P. Seymour and R. Thomas) *Journal of Combinatorial Theory. Ser B, Vol. 100 (2010), 313-331*
12. The three-in-a-tree problem (*with* Paul Seymour) *Combinatorica, Vol. 30 (2010), 387-417*
13. An approximate version of Hadwiger’s conjecture for claw-free graphs (*with* Alexandra Ovetsky Fradkin) *Journal of Graph Theory, 63 (2010) 259-278*
14. 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*

15. Even pairs in Berge graphs (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, 99 (2009), 370-377
16. 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
17. Clawfree Graphs V — Global structure (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, Vol. 98 (2008), 1373-1410
18. The Erdos Hajnal Conjecture for bullfree graphs (*with S. Safra*) *Journal of Combinatorial Theory. Ser B*, 98 (2008), 1301-1310
19. Hadwiger's conjecture for quasi-line graphs (*with A. Overtsky Fradkin*) *Journal of Graph Theory* 59 (2008), 17-33
20. Detecting a theta or a prism (*with R. Kapadia*) *SIAM Journal on Discrete Math* 22(2008), 1164-1186
21. An algorithm for packing non-zero A -paths in group-labeled graphs (*with William H. Cunningham and Jim Geelen*) *Combinatorica* 28(2008), 145-161
22. Cycles in dense digraphs (*with Paul Seymour and Blair Sullivan*) *Combinatorica* 28(2008), 1-18
23. 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
24. Clawfree Graphs IV — Decomposition theorem (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, Vol. 98 (2008), 839-938
25. Solution of three problems of Cornuéjols (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, Vol. 98 (2008), 116-135
26. Clawfree Graphs III — Circular interval graphs (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B* 98(2008), 812-834
27. Clawfree Graphs II — Non-orientable prismatic graphs (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, Vol. 98 (2008), 249-290
28. Clawfree Graphs I — Orientable prismatic graphs (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B*, Vol. 97 (2007), 867-901

29. Excluding induced subgraphs (*with Paul Seymour*) *Surveys in Combinatorics 2007, London Math Soc Lecture Note Series Vol. 346, 99-119*
30. Coloring quasi-line graphs (*with Alexandra Ovetsky*) *Journal of Graph Theory Vol. 54(2007), 41-50*
31. The Roots of the Independence Polynomial of a Clawfree Graph (*with Paul Seymour*) *Journal of Combinatorial Theory. Ser B, Vol. 97 (2007), 350-357*
32. The Strong Perfect Graph Theorem (*with N.Robertson, P.Seymour, R.Thomas*) *Annals of Math Vol 164(2006), 51-229*
33. 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*
34. Berge Trigraphs *Journal of Graph Theory Vol 53(2006), 1-55*
35. The Structure of Clawfree Graphs (*with Paul Seymour*) *Surveys in Combinatorics 2005, London Math Soc Lecture Note Series Vol. 327, 153-171*
36. Partial characterizations of clique-perfect graphs, (*with F. Bonomo, and G.Durán*) *Electronic Notes in Discrete Mathematics Vol. 19(2005), 95-101* (extended abstract)
37. Recognizing Berge Graphs (*with G.Cornuéjols, X.Liu, P.Seymour, K.Vušković*) *Combinatorica Vol. 25(2005), 143-187*
38. Detecting Even Holes (*with K. Kawarabayashi, P. Seymour*) *Journal of Graph Theory Vol. 48(2005), 85-111*
39. Progress on Perfect Graphs (*with N.Robertson, P.Seymour, R.Thomas*) *Mathematical Programming Ser. B 97(2003), 405-422*
40. Berge Trigraphs and Their Applications, *Ph.D. Thesis, Princeton University, 2003*
41. Triangulated Spheres and Colored Cliques (*with R. Aharoni, A. Kotlov*) *Discrete and Computational Geometry 28 (2002), 223-229*
42. Systems of Disjoint Representatives, M.Sc. Thesis, Technion.

Conference Proceedings

1. 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, Mar. 2010.*

Papers to appear

1. Growing without cloning (*with Paul Seymour*), *to appear in SIAM Journal on Discrete Mathematics*
2. A counterexample to a conjecture of Schwartz (*with Felix Brandt, Ilhee Kim, Gaku Liu, Sergey Norin, Alex Scott, Paul Seymour and Stephan Thomasse*) *to appear in Social Choice and Welfare*
3. Finding minimum clique capacity (*with Sang-il Oum and Paul Seymour*) *to appear in Combinatorica*
4. Clawfree Graphs VII. Quasi-line graphs (*with Paul Seymour*) *to appear in JCT B*
5. Excluding induced subdivisions of the bull and related graphs (*with Irena Penev, Alex Scott and Nicolas Trotignon*), *to appear in JGT*
6. Large cliques or stable sets in graphs with no four-edge path and no five-edge path in the complement (*with Yori Zwols*) *to appear in JGT*
7. Perfect matchings in planar cubic graphs (*with Paul Seymour*) *to appear in Combinatorica*
8. Packing seagulls (*with Paul Seymour*) *to appear in Combinatorica*

Papers submitted for publication

1. Extending the Gyárfás-Sumner conjecture (*with Paul Seymour*), *submitted for publication*
2. Coloring perfect graphs with no balanced skew-partitions (*with Nicolas Trotignon, Théophile Trunck and Kristina Vusković*), *submitted for publication*
3. LexBFS, structure and algorithms (*with Pierre Aboulker, Pierre Charbit, Nicolas Trotignon and Kristina Vuskovic*), *submitted for publication*
4. Forcing large transitive subtournaments (*with Eli Berger and Krzysztof Choromanski*), *submitted for publication*
5. De Bruijn–Erdős theorem for chordal graphs (*with Laurent Beaudou, Adrian Bondy, Xiaomin Chen, Ehsan Chiniforooshan, Vašek Chvátal, Nicolas Fraiman, Yori Zwols*), *submitted for publication*

6. Lines in hypergraphs (*with* Laurent Beaudou, Adrian Bondy, Xiaomin Chen, Ehsan Chiniforooshan, Vašek Chvátal, Nicolas Fraiman, Yori Zwols), *submitted for publication*
7. The structure of claw-free perfect graphs (*with* with Matthieu Plumettaz), *submitted for publication*
8. Optimal anti-thickenings of claw-free graphs (*with* Andrew King), *submitted for publication*
9. Detecting an induced net subdivision (*with* Paul Seymour and Nicolas Trotignon), *submitted for publication*
10. A local strengthening of Reed's ω , Δ , and χ conjecture for quasi-line graphs (*with* Andrew King, Matthieu Plumettaz and Paul Seymour), *submitted for publication*
11. Rao's conjecture on degree sequences (*with* Paul Seymour), *submitted for publication*
12. Substitutions and χ -boundedness (*with* Irena Penev, Alex Scott and Nicolas Trotignon), *submitted for publication*
13. The structure of bull-free perfect graphs (*with* Irena Penev), *submitted for publication*
14. Tournaments and coloring (*with* Eli Berger, Krzysztof Choromanski, Jacob Fox, Martin Loeb, Alex Scott, Paul Seymour and Stephan Thomassé), *submitted for publication*
15. Disjoint paths in tournaments (*with* Alex Scott and Paul Seymour), *submitted for publication*

Manuscripts not yet submitted and papers in preparation

1. Edge-disjoint paths in 4-edge connected graphs, (*with* Paul Seymour), *in preparation*
2. Pseudocelebrities in tournaments (*with* Krzysztof Choromanski and Paul Seymour), *in preparation*
3. Edge-coloring 8-regular planar graphs (*with* Katherine Edwards and Paul Seymour), *in preparation*
4. Ups and downs of the four-edge path (*with* Peter Maceli), *in preparation*
5. Fuzzy circular interval tournaments (*with* Paul Seymour), *in preparation*