Publications of Christian Löwenstein

August 13, 2015

Theses

1. C. Löwenstein, *Domination in Graphs of Minimum Degree at Least Two and Large Girth*, Diploma thesis, Universität Bonn, 2007.

2. C. Löwenstein, *In the Complement of a Dominating Set*, Dissertation, TU Ilmenau, 2010.

3. C. Löwenstein, *Transversals in Hypergraphs*, Habilitation, University of Ulm (submitted: December 2014, current status: under review).

Refereed Articles

1. C. Löwenstein and D. Rautenbach, Domination in Graphs of Minimum Degree at least Two and large Girth, *Graphs Combin.* **24** (2008), 37-46.

2. C. Löwenstein, D. Rautenbach, and F. Regen, On Spanning Tree Congestion, *Discrete Math.* **309** (2009), 4653-4655.

3. M. A. Henning, C. Löwenstein, and D. Rautenbach, Remarks about Disjoint Dominating Sets, *Discrete Math.* **309** (2009), 6451-6458.

4. M. A. Henning, C. Löwenstein, and D. Rautenbach, An Independent Dominating Set in the Complement of a Minimum Dominating Set of a Tree, *Appl. Math. Lett.* **23** (2010), 79-81.

5. C. Löwenstein and D. Rautenbach, Pairs of Disjoint Dominating Sets and the Minimum Degree of Graphs, *Graphs Combin.* **26** (2010), 407-424.

6. C. Löwenstein, D. Rautenbach, and I. Schiermeyer, Cycle Length Parities and the Chromatic Number, *J. Graph Theory* **64** (2010), 210-218.

7. M. A. Henning, C. Löwenstein, D. Rautenbach, and J. Southey, Disjoint Dominating and Total Dominating Sets in Graphs, *Discrete Appl. Math.* **158** (2010), 1615-1623.

8. M. A. Henning, C. Löwenstein, and D. Rautenbach, Partitioning a Graph into a Dominating Set, a Total Dominating Set, and something else, *Discuss. Math. Graph Theory* **30** (2010), 563-574.

9. C. Löwenstein, D. Rautenbach, and F. Regen, On Hamiltonian Paths in Distance Graphs, *Appl. Math. Lett.* **24** (2011), 1075-1079.

10. C. Löwenstein, A. S. Pedersen, D. Rautenbach, and F. Regen, Independence, Odd Girth, and Average Degree, *J. Graph Theory* **67** (2011), 96-111.

11. M. A. Henning, C. Löwenstein, and D. Rautenbach, Dominating Sets, Packings, and the Maximum Degree, *Discrete Math.* **311** (2011), 2031-2036.

12. C. Löwenstein and D. Rautenbach, Cohabitation of Independent Sets and Dominating Sets in Trees, *Util. Math.* **85** (2011), 299-308.

13. M. A. Henning and C. Löwenstein, Hypergraphs with Large Transversal Number and with Edge Sizes at Least Four, *Cent. Eur. J. Math.* **10** (2012), 1133-1140.

14. C. Löwenstein and D. Rautenbach, Pairs of Disjoint Dominating Sets in Connected Cubic Graphs, *Graphs Combin.* **28** (2012), 407-421.

15. M. A. Henning, C. Löwenstein, and D. Rautenbach, Independent Sets and Matchings in Subcubic Graphs, *Discrete Math.* **312** (2012), 1900-1910.

16. M. A. Henning and C. Löwenstein, Hypergraphs with Large Domination Number and with Edge Sizes at Least Three, *Discrete Appl. Math.* **160** (2012), 1757-1765.

17. M. A. Henning and C. Löwenstein, Locating-total domination in claw-free cubic graphs, *Discrete Math.* **312** (2012), 3107-3116.

18. C. Löwenstein, D. Rautenbach, and F. Regen, Chiraptophobic Cockroaches evading a Torch Light, *Ars Combin.* **111** (2013), 181-192.

19. P. Dorbec, M. A. Henning, C. Löwenstein, M. Montassier, and André Raspaud, Generalized Power Domination in Regular Graphs, *SIAM J. Discrete Math.* **27** (2013), 1559-1574.

20. M. A. Henning, C. Löwenstein, and D. Rautenbach, Independent Domination in Subcubic Bipartite Graphs of Girth at least Six, *Discrete Appl. Math.* **162** (2014), 399-403.

21. H. A. Ahangar, M. A. Henning, C. Löwenstein, V. Samodivkin, and Y. Zhao, Signed Roman domination in graphs, *J. Comb. Optim.* **27** (2014), 241-255.

22. M. A. Henning and C. Löwenstein, A characterization of hypergraphs that achieve equality in the Chvátal-McDiarmid Theorem, *Discrete Math.* **323** (2014), 69-75.

23. C. Löwenstein, D. Rautenbach, and R. Soták, On Hamiltonian Paths and Cycles in Sufficiently Large Distance Graphs, *Discrete Math. Theor. Comput. Sci.* **16** (2014), 7-30.

24. M. A. Henning, C. Löwenstein, J. Southey, and A. Yeo, A New Lower Bound on the Independence Number of a Graph and Applications, *Electronic J. Combin.* **21** (2014), P1.38.

25. S. Dantas, F. Joos, C. Löwenstein, D. Rautenbach, and D. Sousa, Domination and total domination in cubic graphs of large girth, *Discrete Appl. Math.* **174** (2014), 128-132.

26. F. Joos, C. Löwenstein, F. de S. Oliveira, D. Rautenbach, and J. L. Szwarcfiter, Graphs of Interval Count Two with a Given Partition, *Inform. Process. Lett.* **114** (2014), 542-546.

27. M. A. Henning and C. Löwenstein, An Improved Lower Bound on the Independence Number of a Graph, *Discrete Appl. Math.* **179** (2014), 120-128.

Accepted Manuscripts

1. F. Foucaud, M. A. Henning, C. Löwenstein, and T. Sasse, Locating-Dominating Sets in Twin-Free Graphs, to appear in *Discrete Appl. Math.*

2. M. A. Henning and C. Löwenstein, The Fano Plane and the Strong Independence Ratio in Hypergraphs of Maximum Degree Three, to appear in *J. Graph Theory*.

3. M. A. Henning and C. Löwenstein, A Characterization of Hypergraphs with Large Domination Number, to appear in *Discuss. Math. Graph Theory*.

Submitted Manuscripts

1. M. A. Henning, F. Joos, C. Löwenstein, and T. Sasse, Induced Cycles in Graphs.

2. M. A. Henning, F. Joos, C. Löwenstein, and D. Rautenbach, Induced 2-Regular Subgraphs in k-Chordal Cubic Graphs.

3. P. Borowiecki, M. Gentner, C. Löwenstein, and D. Rautenbach, Independence in Uniform Linear Triangle-free Hypergraphs.