

# Publications

by **Stephan Dominique Andres**

## Articles in Refereed Journals

- [1] Andres SD, Strong and weak perfect digraph theorems for perfect,  $\alpha$ -perfect and strictly perfect digraphs. *Discuss. Math. Graph Theory* 43 (2023) 909–930.
- [2] Andres SD, Dross F, Huggan MA, Mc Inerney F, Nowakowski RJ, The complexity of two colouring games. *Algorithmica* 85 (2023) 1067–1090.
- [3] Andres SD, Charpentier C, Fong WL, Game-perfect semiorientations of forests. *Discuss. Math. Graph Theory* 42 (2022) 501–534.
- [4] Andres SD, Greedy versus recursive greedy: uncorrelated heuristics for the binary paint shop problem. *Discrete Applied Math.* 303 (2021) 4–7.
- [5] Andres SD, Equality perfect graphs and digraphs. *Contributions to Discrete Math.* 15 (2020) 159–178.
- [6] Andres SD, On kernels in strongly game-perfect digraphs and a characterisation of weakly game-perfect digraphs. *AKCE Internat. J. Graphs Combin.* 17 (2020) 539–549.
- [7] Andres SD, Bergold H, Hochstättler W, Wiehe J, A semi-strong perfect digraph theorem. *AKCE Internat. J. Graphs Combin.* 17 (2020) 992–994.
- [8] Andres SD, Falcón RM, Colouring games based on autotopisms of Latin hyper-rectangles. *Quaestiones Mathematicae* 42 (2019) 953–975.
- [9] Andres SD, Huggan M, Mc Inerney F, Nowakowski RJ, The orthogonal colouring game. *Theor. Comp. Sci.* 795 (2019) 312–325.
- [10] Andres SD, Lock E, Characterising and recognising game-perfect graphs. *Discrete Math. Theor. Comput. Sci.* 21:1 (2019) #6, 39pp.
- [11] Falcón RM, Andres SD, Autotopism stabilized colouring games on rook’s graphs. *Discrete Applied Math.* 266 (2019) 200–212.
- [12] Andres SD, Theuser A, Note on the game colouring number of powers of graphs. *Discuss. Math. Graph Theory* 36 (2016) 31–42.
- [13] Andres SD, Hochstättler W, Perfect digraphs. *J. Graph Theory* 79 (2015) 21–29.
- [14] Andres SD, Hochstättler W, The game colouring number of powers of forests. *Discrete Math. Theor. Comput. Sci.* 18:1 (2015) #2, 9pp.
- [15] Andres SD, Hochstättler W, Merkel M, On a base exchange game on bispanning graphs. *Discrete Applied Math.* 165 (2014) 25–36.
- [16] Andres SD, Game-perfect digraphs. *Math. Meth. Oper. Res.* 76 (2012) 321–341.

- [17] Andres SD, On characterizing game-perfect graphs by forbidden induced subgraphs. *Contributions to Discrete Math.* 7 (2012) 21–34.
- [18] Andres SD, On multiperiodic infinite recursions and their finite core. *J. Integer Sequences* 14 (2011) Art. 11.2.7, 9pp.
- [19] Andres SD, Hochstättler W, Some heuristics for the binary paint shop problem and their expected number of colour changes. *J. Discrete Algorithms* 9 (2011) 203–211.
- [20] Andres SD, Hochstättler W, The game chromatic number and the game colouring number of classes of oriented cactuses. *Information Process. Lett.* 111 (2011) 222–226.
- [21] Andres SD, Hochstättler W, Schallück C, The game chromatic index of wheels. *Discrete Appl. Math.* 159 (2011) 1660–1665.
- [22] Andres SD, Directed defective asymmetric graph coloring games. *Discrete Appl. Math* 158 (2010) 251–260.
- [23] Andres SD, Note on the number of rooted complete  $N$ -ary trees. *Ars Combin.* 94 (2010) 465–469.
- [24] Andres SD, Game-perfect graphs. *Math. Methods Oper. Res.* 69 (2009) 235–250.
- [25] Andres SD, Classification of all associative mono- $n$ -ary algebras with 2 elements. *Int. J. Math. Math. Sci.* (2009) Art. ID 678987, 16 pp.
- [26] Andres SD, Asymmetric directed graph coloring games. *Discrete Math.* 309 (2009) 5799–5802.
- [27] Andres SD, Lightness of digraphs in surfaces and directed game chromatic number. *Discrete Math.* 309 (2009) 3564–3579.
- [28] Andres SD, The incidence game chromatic number. *Discrete Appl. Math.* 157 (2009) 1980–1987.
- [29] Andres SD, The game chromatic index of forests of maximum degree  $\Delta \geq 5$ . *Discrete Appl. Math.* 154 (2006) 1317–1323.

## Errata

- [30] Andres SD, Huggan M, Mc Inerney F, Nowakowski RJ, Corrigendum to “The orthogonal colouring game” [*Theor. Comput. Sci.* 795 (2019) 312–325]. *Theor. Comput. Sci.* 842 (2020) 133–135.
- [31] Andres SD, Erratum to: The incidence game chromatic number [*Discrete Appl. Math.* 157 (9) (2009) 1980–1987]. *Discrete Appl. Math.* 158 (2010) 728.

## Abstracts in Conference Proceedings

- [32] Andres SD, Bergold H, Falcón RM, Autoparatopism stabilized colouring games on rook’s graphs. *Discrete Mathematics Days 2018. Electron. Notes Discrete Math.* 68 (2018) 233–238.

- [33] Andres SD, Hochstättler W, Perfect digraphs: answers and questions, in: Dušan Knop (ed.): Midsummer Combinatorial Workshop 2013. IUUK-CE-ITI series 2014, 2014-614 (2014) 7–9.
- [34] Andres SD, On characterizing game-perfect graphs by forbidden induced subgraphs, in: Jiri Fink (ed.): Midsummer Combinatorial Workshop 2009. KAM-DIMATIA Series 2010, 2010-959 (2010) 12–17.
- [35] Andres SD, The incidence game chromatic number. ODSA 2006 — Conference on Optimal Discrete Structures and Algorithms. Electron. Notes Discrete Math. 27 (2006) 1–2.
- [36] Andres SD, Game-perfect graphs with clique number 2. CTW2006 — Cologne-Twente Workshop on Graphs and Combinatorial Optimization. Electron. Notes Discrete Math. 25 (2006) 13–16.
- [37] Andres SD, The positive lightness of digraphs, embeddable in a surface, without 4-cycles. 7th International Colloquium on Graph Theory. Electron. Notes Discrete Math. 22 (2005) 119–122.
- [38] Andres SD, The game chromatic index of forests of maximum degree 5. 2nd Cologne-Twente Workshop on Graphs and Combinatorial Optimization. Electron. Notes Discrete Math. 13 (2003) 5–8.

### **Theses**

- [39] Andres SD, Colouring concepts on combinatorial structures. Habilitation thesis, FernUniversität in Hagen, submitted 2019, accepted 2021.
- [40] Andres SD, Digraph coloring games and game-perfectness. Ph.D Thesis, Universität zu Köln, Verlag Dr. Hut, 2007.
- [41] Andres SD, Spieltheoretische Kantenfärbungsprobleme auf Wäldern und verwandte Strukturen. Diploma Thesis, Universität zu Köln, 2003.

### **Miscellanea**

- [42] Andres SD, A note on the digraph parameters lightness and weight and their duals heaviness and mass. Seminarberichte Mathematik aus der Fakultät für Mathematik und Informatik der FernUniversität in Hagen 87 (2015) 113–118.
- [43] Andres SD, Börger R: Note on a 1-colouring game on paths and cycles. Seminarberichte Mathematik aus der Fakultät für Mathematik und Informatik der FernUniversität in Hagen 87 (2015) 73–76.

### **Submitted Papers**

- [44] Andres SD, Fong WL, Line game-perfect graphs. Preprint (2023) arXiv:2301.00932

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