

Pavol Hell

1 Journal Publications

1. T. Feder, P. Hell, and C. Subi, Distance-two colorings of Barnette graphs, submitted.
2. T. Feder and P. Hell, Complexity of correspondence homomorphisms, under revision in *Discrete Applied Mathematics*.
3. P. Hell, C. Hernandez-Cruz, and C. Linhares-Sales, Minimal obstructions to 2-polar graphs, accepted in *Discrete Applied Mathematics*.
4. T. Feder and P. Hell, Correspondence homomorphisms to reflexive graphs, *Electronic Notes in Discrete Mathematics* 62 (2017) 9 – 14.
5. F. Foucaud, A. Harutyunyan, P. Hell, S. Legay, Y. Manoussakis, and R. Naserasr, The complexity of tropical graph homomorphisms, *Discrete Applied Mathematics* 229 (2017) 64 – 81.
6. T. Feder, P. Hell, and C. Hernandez-Cruz, Colourings, homomorphisms, and partitions of transitive digraphs, *European J. Combinatorics* 60 (2017) 55 – 65.
7. R.C. Brewster, F. Foucaud, P. Hell, and R. Naserasr, The complexity of signed graph and 2-edge-coloured graph homomorphisms, *Discrete Mathematics* 340 (2017) 223 – 235.
8. P. Hell and S.W. Huang, Complexity of coloring graphs without paths and cycles, *Discrete Applied Math.* 216 (2017) 211 – 232.
9. P. Hell and C. Hernandez-Cruz, Strict chordal and strict split digraphs, *Discrete Applied Mathematics* 216 (2017) 609 – 617.
10. S. Chaplick, P. Hell, Y. Otachi, T. Saitoh, R. Uehara, Ferrers dimension of grid intersection graphs, *Discrete Applied Mathematics* 216 (2017) 130 – 135.
11. P. Hell and P.L. Yen, Join colourings of chordal graphs, *Discrete Mathematics* 338 (2015) 2453–2461.
12. P. Hell and C. Hernandez-Cruz, Point determining digraphs, $\{0, 1\}$ -matrix partitions, and dualities in full homomorphisms, *Discrete Mathematics* 338 (2015) 1755–1762.
13. L. Gargano, P. Hell, J. Peters, and U. Vaccaro, Influence diffusion in social networks under time window constraints, *Theoretical Computer Science* 584 (2015) 53–66.
14. T. Feder, P. Hell, B. Larose, M. Siggers, and C. Tardif, Graphs admitting k-NU operations: part 2, the irreflexive case, *SIAM J. Discrete Math.* 28 (2014) 817–834.
15. P. Codara, O.M. D'Antona, and P. Hell, A simple combinatorial interpretation of certain generalized and Stirling numbers, *Discrete Math.* 318 (2014) 53–57.
16. P. Hell and A. Pultr, Connected obstructions to full graph homomorphisms, *European J. Combinatorics* 41 (2014) 278–288.
17. P. Hell and A. Mishra, H -colouring degree-bounded (acyclic) digraphs, *Theoretical Computer Science* 554 (2014) 40–49.
18. T. Feder, P. Hell, and O. Shklarsky, Matrix partitions of split graphs, *Discrete Applied Math.* 166 (2014) 91 – 96.

19. M. Francis, P. Hell, and J. Stacho, Blocking quadruple: a new obstruction to circular-arc graphs, *SIAM J. Discrete Math.* 28 (2014) 631 – 655.
20. P. Hell and M. Siggers, Semilattice polymorphisms of reflexive graphs, *European J. Combinatorics* 36 (2014) 694–706.
21. P. Hell and C. Hernandez-Cruz, On the complexity of the 3-kernel problem in some classes of digraphs, *Discussiones Mathematicae Graph Theory* 34 (2014) 167–185.
22. P. Hell, Graph partitions with prescribed patterns, *European J. Combinatorics* 35 (2014) 335–353.
23. T. Feder, P. Hell, B. Larose, C. Loten, M. Siggers, and C. Tardif, Graphs admitting k-NU operations: part 1, the reflexive case, *SIAM J. Discrete Math.* 27 (2013) 1940–1963.
24. S. Das, M. Francis, P. Hell, and J. Huang, Recognition and characterization of chronological interval digraphs, *Electronic J. Combinatorics* 20 (2013) P5.
25. T. Feder, P. Hell and S. Nekooei Rizi, Obstructions to partitions of chordal graphs, *Discrete Math.* 313 (2013) 1861 – 1871.
26. P. Hell and A. Rafiey, The dichotomy of minimum cost homomorphism problems for digraphs, *SIAM J. Discrete Math.* 26 (2012) 1597 – 1608.
27. P. Hell and A. Rafiey, Monotone proper interval digraphs and min-max orderings, *SIAM J. Discrete Math.* 26 (2012) 1576 – 1596.
28. M. Groshaus, P. Hell, J. Stacho, On edge intersections of bicliques of graphs, *Discrete Appl. Math.* 160 (2012) 2698 – 2708.
29. T. Feder, P. Hell, J. Huang, and A. Rafiey, Interval graphs, adjusted interval digraphs, and reflexive list homomorphisms, *Discrete Appl. Math.* 160 (2012) 697 – 707.
30. T. Feder, P. Hell, J. Stacho, and G. Schell, Dichotomy for tree-structured matrix partition problems, *Discrete Appl. Math.* 159 (2011) 1217 – 1224.
31. M. Groshaus, P. Hell, S. Klein, L. Tito Nogueira, F. Protti, Cycle transversals in bounded degree graphs, *Discrete Math. and Theoretical CS* 13 (2011) 45 – 66.
32. H.A. Harutyunyan, P. Hell, and A. Liestman, Messy broadcasting – decentralized broadcast schemes with limited knowledge, *Discrete Appl. Math.* 159 (2011) 322 – 327.
33. T. Feder, P. Hell, P. Johnsson, A. Krokhin, and G. Nordh, Retractions to pseudoforests, *SIAM J. Discrete Math.* 24 (2010) 101 – 112.
34. P. Hell, Z.S. Pan, T.L. Wong, X.D. Zhu, Adaptable chromatic numbers of graph products, *Discrete Math.* 309 (2009) 6153 – 6159.
35. P. Hell and D.G. Kirkpatrick, Linear-time certifying algorithms for near-graphical sequences, *Discrete Math.* 309 (2009) 5703 – 5713.
36. T. Feder, P. Hell, and J. Huang, Extension problems with degree bounds, *Discrete Applied Math.* 157 (2009) 1592 – 1599.
37. D. de Werra, T. Ekim, P. Hell, and J. Stacho, Polarity of chordal graphs, *Discrete Applied Math.* 156 (2008) 2469–2479.
38. T. Feder, P. Hell, and J. Huang, Brooks type theorems for pair list colourings and graph homomorphisms, *SIAM J. Discrete Math.* 22 (2008) 1 – 14.
39. G. Gutin, P. Hell, A. Rafiey, and A. Yeo, A dichotomy for minimum cost graph homomorphisms, *European J. Combinatorics* 29 (2008) 900 – 911.
40. P. Hell and X. Zhu, On the adaptable chromatic number of graphs, *European J. Combinatorics* 29 (2008) 912 – 921.

41. R.C. Brewster, P. Hell, and R. Rizzi, Oriented star packings, *J. Combinatorial Theory, Series B* 98 (2008) 558 – 576.
42. Richard Brewster, Tomas Feder, Pavol Hell, Jing Huang, and Gary MacGillivray, Near-unanimity functions and varieties of reflexive graphs, *SIAM J. Discrete Math.* 22 (2008) 938 – 960.
43. T. Feder and P. Hell, On realizations of point determining graphs, and obstructions to full homomorphisms, *Discrete Math.* 308 (2008) 1639 – 1652.
44. P. Hell and J. Nešetřil, Density of trigraph homomorphisms, *Graphs and Combinatorics* 23 (2007) 275 – 281.
45. T. Feder, P. Hell, and J. Huang, The structure of bi-arc trees, *Discrete Math.* 307 (2007) 393 – 401.
46. T. Feder, P. Hell, and W. Xie, Matrix partitions with finitely many obstructions *Electronic Journal of Combinatorics* R58 14 (2007).
47. T. Feder, P. Hell, and J. Huang, List homomorphisms of graphs with bounded degrees, *Discrete Math.* 307 (2007) 386 – 392.
48. T. Feder and P. Hell, Matrix partitions of perfect graphs, *Discrete Math.* 306 (2006) 2450 – 2460.
49. T. Feder, P. Hell, and K. Tucker-Nally, Digraph matrix partitions and trigraph homomorphisms, *Discrete Applied Math.* 154 (2006) 2458 – 2469.
50. T. Feder and P. Hell, Full constraint satisfaction problems, *SIAM J. on Computing*, 36 (2006) 230-246.
51. David Hartvigsen, Pavol Hell and Jacint Szabo, The k-piece packing problem, *J. Graph Theory* 52 (2006) 267 – 293.
52. K. Cameron and P. Hell, Independent packings in structured graphs, *Math. Programming (B)* 105 (2006) 201 – 213.
53. T. Feder, P. Hell, S. Klein, L.T. Nogueira, and F. Protti, List matrix partitions of chordal graphs, *Theoretical Computer Science* 349 (2005) 52 – 66.
54. P. Hell and J. Huang, A generalization of the theorem of Lekkerkerker and Boland, *Discrete Math.* 299 (2005) 113 – 119.
55. P. Hell, S. Klein, L. Tito-Nogueira, and F. Protti, Packing r-cliques in weighted chordal graphs, *Annals of O.R.* 138 (2005) 179 – 187.
56. P. Hell and J. Huang, Certifying LexBFS recognition algorithms for proper interval graphs and proper interval bigraphs, *SIAM J. Discrete Math.* 18 (2005) 554 – 570.
57. Pavol Hell and Juan Jose Montellano, Polychromatic cliques, *Discrete Math.* 285 (2004) 319 – 322.
58. L.Gargano, M. Hammar, P. Hell, L. Stacho, and U. Vaccaro, Spanning spiders in graphs, and light-splitting switches, *Discrete Math.* 285 (2004) 83 – 95.
59. P. Hell and J. Huang, Interval bigraphs and circular arc graphs, *J. Graph Theory* 46 (2004) 313 – 327.
60. P. Hell, S. Klein, L. Tito-Nogueira, and F. Protti, Partitioning chordal graphs into independent sets and cliques, *Discrete Applied Math.* 141 (2004) 185 – 194.
61. F. Comellas and P. Hell, Broadcasting in generalized chordal rings, *Networks* 42 (2003) 123 – 134.
62. T. Feder, P. Hell, and B. Mohar, Acyclic homomorphisms and circular colorings of digraphs, *SIAM J. on Discrete Math.* 17 (2003) 161 – 169.
63. R. Brewster, P. Hell, S. Pantel, R. Rizzi, and A. Yeo, Packing paths in digraphs, *J. Graph Theory* 44 (2003) 81-94.
64. T. Feder, P. Hell, S. Klein, and R. Motwani, List partitions, *SIAM J. on Discrete Math.* 16 (2003) 449-478.
65. T. Feder, P. Hell, and J. Huang, Bi-arc graphs and the complexity of list homomorphisms, *J. Graph Theory* 42 (2003) 61 - 80.

66. P. Hell and M. Rosenfeld, Antidirected Hamiltonian paths between specified vertices of a tournament, *Discrete Applied Math.* 117 (2002) 87 - 98.
67. R. Brewster and P. Hell Homomorphisms to powers of digraphs, *Discrete Math.* 244 (2002) 31 - 41.
68. L. Gargano, P. Hell, and S. Pérennes, Colouring all directed paths in a symmetric tree, with an application to optical networks, *J. of Graph Theory* 38 (2001) 183 - 196.
69. P. Hell, R. Shamir, and R. Sharan, A fully dynamic algorithm for recognizing and representing proper interval graphs, *SIAM J. Computing* 31 (2001) 289 - 305.
70. A. Galluccio, L. Goddyn, P. Hell, High girth graphs avoiding a minor are nearly bipartite, *J. Combinatorial Theory, series B* 83 (2001) 1 - 14.
71. P. Hell, A.V. Kostochka, A. Raspaud, and E. Sopena, On nice graphs, *Discrete Math.* 234 (2001) 39 - 51.
72. P. Hell, J. Nešetřil, A. Raspaud, and E. Sopena, Three-and-more set theorems, *Comment. Math. Univ. Carol.* 41 (2000) 793 - 802.
73. A. Galluccio, P. Hell, J. Nešetřil, The complexity of H-colouring of bounded degree graphs, *Discrete Math.* 222 (2000) 101 - 109.
74. P. Hell and X.Zhu, The circular chromatic number of series-parallel graphs, *J. Graph Theory* 33 (2000) 14 - 24.
75. T. Feder, P. Hell, and J. Huang, List homomorphisms and circular arc graphs, *Combinatorica* 19 (1999) 487 - 505.
76. M. Fellows, P. Hell and K. Seyffarth, Constructions of dense planar networks, *Networks* 32 (1998) 275 - 281.
77. T. Feder and P. Hell, List homomorphisms to reflexive graphs, *Journal of Combin. Theory, Series B*, 72 (1998) 236 - 250.
78. L. Haddad, P. Hell, and E. Mendelsohn, On the complexity of colouring areflexive h-ary relations, *Ars Combinatoria* 48 (1998) 111 - 128.
79. B. Beauquier, P. Hell, and S. Pérennes, Optimal wavelength-routed multicasting, *Discrete Applied Mathematics* 84 (1998) 15 - 20. (Included in 'Editor's choice 1998'.)
80. P. Hell and K. Seyffarth, Broadcasting in planar graphs, *The Australasian Journal of Combinatorics* 17 (1998) 309 - 318.
81. P. Hell and J. Huang, Two remarks on circular arc graphs, *Graphs and Combinatorics* 13 (1997) 65 - 72.
82. R.C. Brewster, P. Hell, and G. MacGillivray, The complexity of restricted graph homomorphisms, *Discrete Math.* 167/168 (1997) 145 - 154.
83. P. Hell, J. Nesetril, and X. Zhu, Complexity of tree homomorphisms, *Discrete Applied Math.* 70 (1996) 23 - 36.
84. B. Bhattacharya, P. Hell and J. Huang, A linear algorithm for maximum cliques in proper circular arc graphs, *SIAM J. on Discrete Math.* 9 (1996) 274 - 289.
85. P. Hell, D.G. Kirkpatrick, and B. Li, Rounding in symmetric matrices and undirected graphs, *Discrete Applied Math.* 70 (1996) 1 - 22.
86. X. Deng, P. Hell, and J. Huang, Linear time representation algorithms for proper circular arc graphs and proper interval graphs, *SIAM J. of Computing* 25 (1996) 390 - 403.
87. P. Hell, J. Nesetril, and X.Zhu, Duality and polynomial testing of tree homomorphisms, *Transactions of the A.M.S.* 348 (1996) 1281 - 1297.
88. P. Hell and X. Zhu, The existence of homomorphisms to oriented cycles, *SIAM J. on Discrete Math.* 8 (1995) 208 - 222.

89. P. Hell, H. Zhou, and X. Zhu, On homomorphisms to acyclic local tournaments, *J. Graph Theory* 20 (1995) 467 - 471.
90. P. Hell and J. Huang, Lexicographic orientation and representation algorithms for comparability graphs, proper circular arc graphs, and proper interval graphs, *J. of Graph Theory* 20 (1995) 361 - 374.
91. J. Bang-Jensen, P. Hell, and G. MacGillivray, Hereditarily hard colouring problems, *Discrete Math.* 138 (1995) 75 - 92.
92. M. Fellows, P. Hell and K. Seyffarth, Large planar graphs with given diameter and maximum degree, *Discrete Appl. Math.* 61 (1995) 133 - 153.
93. P. Hell, G. Hahn, and S. Poljak, Ultimate independence ratios, *European J. Combinatorics* 16 (1995) 253 - 261.
94. P. Fraisse and P. Hell, Equicovering matroids by distinct bases, *European J. Combinatorics* 16 (1995) 159 - 162.
95. P. Hell, Y. Manoussakis, and Zs. Tuza, Packing problems in edge-coloured graphs, *Discrete Applied Mathematics* 52 (1994) 295 - 306.
96. P. Hell and X. Zhu, Homomorphisms to oriented paths, *Discrete Mathematics* 132 (1994) 107 - 114.
97. P. Hell, H. Zhou, and X. Zhu, Multiplicativity of oriented cycles, *J. Combinatorial Theory B* 60 (1994) 239 - 253.
98. J. Bang-Jensen and P. Hell, On chordal proper circular arc graphs, *Discrete Math.* 128 (1994) 395 - 398.
99. P. Hell, X. Yu, and H. Zhou, Independence ratios of graph powers, *Discrete Math.* 127 (1994) 213-220.
100. P. Hell and K. Seyffarth, Largest planar graphs of diameter two and given degree, *Discrete Math.* 111 (1993) 313 - 322.
101. J-C. Bermond and P. Hell, On even factorizations and the chromatic index of the Kautz and de Bruijn digraphs, *J. Graph Th.* 17 (1993) 647 - 655.
102. H-J. Bandelt, M. Farber, and P. Hell, Absolute reflexive retracts and absolute bipartite retracts, *Discrete Applied Math.* 44 (1993) 9 - 20.
103. D. De Werra, P. Hell, T. Kameda, N. Katoh, P. Solot, and M. Yamashita, Graph endpoint coloring and distributed processing, *Networks* 23 (1993) 93 - 98.
104. P. Hell, H. Zhou, and X. Zhu, Homomorphisms to oriented cycles, *Combinatorica* 13 (1993) 421-433.
105. P. Hell and D.G. Kirkpatrick, Algorithms for degree constrained graph factors of minimum deficiency, *J. of Algorithms* 14 (1993) 115 - 138.
106. R. Häggkvist and P. Hell, Universality of A -mote graphs, *European J. of Combinatorics* 14 (1993) 23 - 27.
107. J. Bang-Jensen and P. Hell, Fast algorithms for finding Hamiltonian paths and cycles in in-tournament digraphs, *Discrete Applied Math.* 41 (1993) 75 - 79.
108. P. Hell, Biography of Martin Farber, 1951 - 1989, *Discrete Applied Mathematics* 44 (1993) 5-7.
109. J. Bang-Jensen, P. Hell, and G. MacGillivray, On the complexity of colouring by superdigraphs of bipartite graphs, *Discrete Math.* 109 (1992) 27 - 44.
110. P. Hell and J. Nešetřil, The core of a graph, *Discrete Math.* 109 (1992) 117 - 126.
111. J-C. Bermond, P. Hell, and J-J. Quisquater, Construction of large packet radio networks, *Parallel Processing Letters* 2 (1992) 3-12.
112. J-C. Bermond, P. Hell, A. Liestman, and J. Peters, New sparse broadcast graphs, *Discrete Applied Math.* 36 (1992) 97 - 130.
113. P. Hell and D.J. Miller, Achromatic numbers and graph operations, *Discrete Math.* 108 (1992) 297 - 305.

114. J-C. Bermond, P. Hell, A. Liestman, and J. Peters, Broadcasting in bounded degree graphs, *SIAM J. on Discrete Math.* 5 (1992) 10-24.
115. P. Hell and J. Nešetřil, Images of rigid digraphs, *European J. Combinatorics* 12 (1991) 33-42.
116. P. Hell and C.E. Yang, A parallel algorithm for the bottleneck allocation problem with bounded variables, *Math. in Economics (China)* 7 (1990) 1 - 12.
117. K. Heinrich, P. Hell, D.G. Kirkpatrick, and G.Z. Liu, A simple existence criterion for $g < f$ -factors, with applications to $[a, b]$ -factors, *Discrete Math.* 85 (1990) 313-317.
118. J.A. Bondy and P. Hell, On the star-chromatic number, *J. Graph Theory* 14 (1990) 479-482.
119. P. Hell and J. Nešetřil, On the complexity of H -colouring, *J. Combin. Theory B* 48 (1990) 92-110.
120. J. Bang-Jensen and P. Hell, On the effect of two cycles on the complexity of colouring, *Discrete Applied Math.* 26 (1990) 1-23.
121. **P. Erdős**, P. Hell, and P. Winkler, Bandwidth versus bandsize, *Annals of Discrete Math.* 41 (1989) 117-130.
122. P. Hell and J. Nešetřil, Universality of directed graphs of a given height, *Archivum Math. (Brno)* 25 (1989) 47-54.
123. P. Hell, D.G. Kirkpatrick, J. Kratochvíl, and I. Kríž, On restricted two-factors, *SIAM J. on Discrete Math.* 4 (1988) 472 -484.
124. J. Bang - Jensen, G. MacGillivray, and P. Hell, The complexity of colouring by semicomplete digraphs, *SIAM J. on Discrete Math.* 1 (1988) 281-298.
125. R. Häggkvist, P. Hell, D.J. Miller, and V. Neumann-Lara, On multiplicative graphs and the product conjecture, *Combinatorica* 8 (1988) 63-74.
126. P. Hell and A. Liestman, Broadcasting in one dimension, *Discrete Applied Math.* 21 (1988) 101-112.
127. K. Heinrich and P. Hell, On the problem of bandsize, *Graphs and Combinatorics* 3 (1987) 279-284.
128. P. Hell and I. Rival, Retracts in graphs, *Canad. J. Math.* 39 (1987) 544-567.
129. P. Hell, W. Li, and J.H. Schmerl, Jump number and width, *Order* 3 (1986) 227-234.
130. P. Hell and D.G. Kirkpatrick, Packings by complete bipartite graphs, *SIAM J. Alg. Disc. Methods* 7 (1986) 199-209.
131. P. Fraisse, P. Hell, and D.G. Kirkpatrick, A note on f-factors in directed and undirected multigraphs, *Graphs and Combinatorics* 2 (1986) 61-66.
132. M. Farber, G. Hahn, P. Hell, and D.J. Miller, Concerning the achromatic number of graphs, *J. Combinatorial Theory B* 40 (1986) 21-39.
133. B. Alspach, M. Gerson, G. Hahn, and P. Hell, On sub-ramsey numbers, *Ars Combinatoria* 22 (1986) 199-206.
134. R.L. Graham and P. Hell, On the history of the minimum spanning tree problem, *Annals of the History of Computing* 7 (1985) 43-57.
135. P. Hell and D.G. Kirkpatrick, Packings by cliques and by finite families of graphs, *Discrete Math.* 49 (1984) 45-59.
136. P. Hell and G. Speer, Matroids with weighted bases and Feynman integrals, *Annals of Discrete Math.* 20 (1984) 165-175.
137. P. Hell and D.G. Kirkpatrick, On the complexity of general graph factor problems, *SIAM J. Computing* 12 (1983) 601-609.
138. J.A. Bondy and P. Hell, Some counter-examples to theorems of Menger type, *Discrete Math.* 44 (1983) 217-220.

139. P. Hell and M. Rosenfeld, The complexity of finding generalized paths in tournaments, *J. of Algorithms* 4 (1983) 601-609.
140. P. Hell and F.S. Roberts, Analogues of Shannon capacity, *Annals of Discrete Math.* 12 (1982) 155-168.
141. R. Häggkvist and P. Hell, Sorting and merging in rounds, *SIAM J. Alg. and Discrete Methods* 3 (1982) 465-473.
142. Z. Hedrlín, P. Hell, and C.S. Ko, Homomorphism interpolation and approximation, *Annals of Discrete Math.* 15 (1982) 213-227.
143. R. Häggkvist and P. Hell, Parallel sorting with constant time for comparisons, *SIAM J. Computing* 10 (1981) 465-472.
144. P. Hell and D.G. Kirkpatrick, On generalized matching problems, *Information Processing Letters* 12 (1981) 33-35.
145. P. Hell and J. Nešetřil, On the edge sets of rigid and corigid graphs, *Math. Nachrichten* 87 (1979) 63-69.
146. P. Hell and J. Nešetřil, Cohomomorphisms of graphs and hypergraphs, *Math. Nachrichten* 87 (1979) 53-61.
147. P. Hell and L.V. Quintas, An intermediate value theorem for graphs with a given group, *J. Graph Th.* 3 (1979) 35-41.
148. P. Hell and D.J. Miller, Graphs with forbidden homomorphic images, *Annals of the N.Y. Acad. Sc.* 319 (1979) 270-280.
149. G. S. Bloom, P. Hell, and H. Taylor, Collecting autographs: m-node graphs with m-integer signatures, *Annals of the N.Y. Acad. Sc.* 319 (1979) 93-102.
150. P. Hell, An introduction to the category of graphs, *Annals of the N.Y. Acad. Sc.* 328 (1979) 120-136.
151. P. Hell and J. Nešetřil, Homomorphisms of graphs and their orientations, *Monatshefte für Math.* 85 (1978) 39-48.
152. P. Hell and D.J. Miller, Graphs with given achromatic number, *Discrete Math.* 16 (1976) 195-207.
153. B. Alspach, T.C. Brown, and P. Hell, On the density sets containing no k-element arithmetic progression of a certain kind, *J. London Math. Soc.* 13, 225-234 (1976)
154. P. Hell, A. Kotzig, and A. Rosa, Some results on the Oberwolfach problem, *Aequationes Math.* 12 (1975) 1-5.
155. P. Hell, Absolute planar retracts and the Four Color Conjecture, *J. Combinatorial Th. B* 17 (1974) 5-10.
156. F. Harary and P. Hell, Generalized Ramsey theory for graphs V: The Ramsey number of a digraph, *Bull. London Math. Soc.* 6 (1974) 175-182; Correction, *ibid.* 7 (1975) 87-88.
157. P. Hell, On some strongly rigid families of graphs and the full embeddings they induce, *Algebra Universalis* 4 (1974) 108-126.
158. P. Hell and J. Nešetřil, Groups and monoids of regular graphs (and of graphs with bounded degrees), *Canad. J. Math.* 25 (1973) 239-251.
159. P. Hell, Full embeddings into some categories of graphs, *Algebra Universalis* 2 (1972) 129-141.
160. P. Hell and A. Rosa, Graph decompositions, handcuffed prisoners and balanced P-designs, *Discrete Math.* 2 (1972) 229-252.
161. V. Chvátal, P. Hell, L. Kučera, and J. Nešetřil, Every finite graph is a full subgraph of a rigid graph, *J. Combinatorial Th.* 11 (1971) 284-286.
162. P. Hell, Une minoration asymptotique des nombres de Schur généralisés et de certains nombres de Ramsey, *C.R. Acad. Sc. Paris*, 270 (1970) 1477-1479.
163. P. Hell and J. Nešetřil, Graphs and k-societies, *Canad. Math.Bull.* 13 (1970) 375-381.
164. P. Hell, Rigid undirected graphs with given number of vertices, *Comment. Math. Univ. Carolinae* 9 (1968) 51-59.

2 Books, Invited Chapters, and Special Volumes:

- P. Hell and J. Nešetřil, **Graphs and Homomorphisms**, Oxford University Press, second edition in preparation.
- Q. Gu, P. Hell, B. Yang (Eds.), **Special Issue on "Algorithmic Aspects in Information and Management"**, Selected full papers from AAIM 2014, Theoretical Computer Science, Volume 607 Part 1, (2015).
- Q. Gu, P. Hell, B. Yang (Eds.), **Algorithmic Aspects in Information and Management**, 10th International Conference, AAIM 2014 Proceedings, LNCS 8546 (2014).
- P. Hell, W. Imrich, and J. Nešetřil, guest editors, **A Volume Dedicated to G. Sabidussi on his 80th Birthday**, *Discrete Math.* Volume 312 (2012) Issue 1.
- P. Hell and J. Nešetřil, Colouring, constraint satisfaction, and complexity, invited survey in *Computer Science Review* 2 (2008) 143–163.
- P. Hell, From graph colouring to constraint satisfaction: there and back again, invited chapter in **Topics in Discrete Mathematics**, Springer Verlag Algorithms and Combinatorics Series, volume 26, 2006, pp. 407 – 432.
- T. Feder, P. Hell, and W. Hochstättler, Generalized colourings (matrix partitions) of cographs, invited chapter in **Graph Theory in Paris**, Trends in Mathematics, Birkhauser Verlag 2006, pp. 149 – 167.
- P. Hell and J. Nešetřil, **Graphs and Homomorphisms**, Oxford University Press 2004 (second printing 2006).
- P. Hell, Algorithmic aspects of graph homomorphisms, invited chapter in **Surveys in Combinatorics 2003** (C.D. Wensley ed.), London Math. Society Lecture Note Series 307, Cambridge University Press 2003, pp. 239-276.
- P. Hell and W. Imrich, guest editors, **A Volume Dedicated to G. Sabidussi**, *Discrete Math.* Volume 109 (1992) Numbers 1 - 3.
- P. Hell, guest editor, **Special Issue on Computational Combinatorics**, *Discrete Applied Math.* 27 (1990).
- B. Alspach, P. Hell, and D.J. Miller, editors, **Algorithmic Aspects of Combinatorics**, North Holland, 1978.

3 Conferences:

1. P. Hell, J. Huang, R.M. McConnell, and A. Rafiey, Interval-like graphs and digraphs, **MFCS** 2018.
2. T. Feder, P. Hell, and C. Subi, Distance-two coloring of Barnette graphs, **CCCG** 2018.
3. P. Hell, H. Nishiyama, and L. Stacho, Hamiltonian cycles in covering graphs of trees, **COCOA** 2017, LNCS (2018) 261–275.
4. P. Hell and M. Nevisi, Minimum cost homomorphisms with constrained costs, **COCOON** 2016, LNCS 9797 (2016) 194–206.
5. V. Dalmau, L. Egri, P. Hell, B. Larose, and A. Rafiey, Descriptive complexity of list H-coloring problems in logspace: a refined dichotomy, **LICS** 2015.
6. M. Francis, P. Hell, and J. Stacho, Forbidden structure characterization of circular-arc graphs and a certifying recognition algorithm, **SODA** 2015.
7. P. Hell, B. Mohar, and A. Rafiey, Ordering without forbidden patterns, **ESA** 2014.
8. S. Chaplick, P. Hell, Y. Otachi, T. Saitoh, R. Uehara, Intersection dimension of bipartite graphs, **TAMS** 2014.
9. P. Hell and S. Huang, Complexity of coloring graphs without paths and cycles, **LATIN** 2014.
10. L. Egri, P. Hell, B. Larose, and A. Rafiey, Space complexity of list H-coloring: a dichotomy, Proceedings of the Twenty-Fifth Annual ACM-SIAM Symposium on Discrete Algorithms, **SODA**, SIAM 2014, pp. 349–365.

11. L. Gargano, P. Hell, J. Peters, and U. Vaccaro Influence diffusion in social networks under time window constraints, 20th International Colloquium **SIROCCO** 2013, LNCS 8179 (2013) 141–152.
12. P. Hell, and A. Misra, Small H -coloring problems for bounded degree digraphs, **COCOON** 2013.
13. M. Francis, P. Hell, and J. Stacho, Obstructions to chordal circular arc graphs, **LAGOS** 2013, Electronic Notes in Discrete Math. 44 (2013) 75–81.
14. P. Hell, M. Hermann, M. Nevisi, Counting partitions of graphs, in Proceedings of the 23rd International Symposium on Algorithms and Computations **ISAAC** 2012, LNCS 7676 (2012) 227–236.
15. P. Hell, M. Mastroianni, A. Rafiey, and M. Nevisi, Approximation of minimum cost homomorphisms, in Proceedings of the 20th Annual European Symposium on Algorithms **ESA** 2012, LNCS 7501, 587–598.
16. P. Hell and A. Rafiey, The dichotomy of list homomorphisms for digraphs, in Proceedings of the Symposium on Discrete Algorithms **SODA** 2011, pp. 1703 – 1713.
17. T. Feder, P. Hell, S. Nekooei Rizi, Partitioning chordal graphs, **Euro-Comb** 2011, Electronic Notes in Discrete Mathematics 38 (2011) 325 – 330.
18. M. Coury, P. Hell, J. Kratochvíl, and T. Vyskočil, Faithful representations by islands in the extended grid, **LATIN** 2010 (A. Lopez-Ortiz Ed.), 9th Latin American Symposium, Oaxaca, Mexico, April 2010, *Lecture Notes in Computer Science* 6034, Springer 2010, pp. 131 – 142.
19. M. Groshaus, P. Hell, S. Klein, L.T. Nogueira, F. Protti, Cycle transversals in bounded degree graphs, Electronic Notes in Discrete Mathematics 35 (2009) 189 –195.
20. T. Feder, P. Hell, J. Huang, A. Rafiey, Adjusted interval digraphs, Electronic Notes in Discrete Mathematics 32 (2009) 83–91.
21. A. Gupta, P. Hell, M. Karimi, and A. Rafiey, Minimum cost homomorphisms to reflexive digraphs, **LATIN** 2008 (E.S. Laber et al. Eds.), Theoretical Informatics, 8th Latin American Symposium, Buzios, Brazil, April 2008, *Lecture Notes in Computer Science* 4957, Springer 2008, pp. 182 – 193.
22. P. Hell, A. Raspaud, and J. Stacho, On injective colourings of chordal graphs, **LATIN** 2008 (E.S. Laber et al. Eds.), Theoretical Informatics, 8th Latin American Symposium, Buzios, Brazil, April 7-11, 2008, *Lecture Notes in Computer Science* 4957, Springer 2008, pp. 520 – 530.
23. M. Coury and P. Hell, Graph embeddings and quantum computers, IRMACS Conference (poster), SFU, 2008.
24. P. Hell, Generalized colourings and matrix partitions, Proc. of ICDM 2006, pp. 141 – 148.
25. T. Feder, P. Hell, and W. Xie, Matrix partitions with finitely many obstructions (extended abstract), *Electronic Notes in Discrete Math.* 28 (2007) 371 – 378.
26. T. Feder, P. Hell, D. Král, and J. Sgall, Two algorithms for list matrix partition, Proc. 16th Annual ACM-SIAM Symposium on Discrete Algorithms **SODA** 2005, 870–876.
27. T. Feder, P. Hell, S. Klein, L.T. Nogueira, and F. Protti, List partitions of chordal graphs, in **LATIN** 2004: Theoretical Informatics, Lecture Notes in Computer Science, Springer Berlin/Heidelberg, volume 2976 (2004) 100 – 108.
28. P. Hell and J. Nešetřil, Counting list homomorphisms and graphs with bounded degrees, in **Graphs, Morphisms and Statistical Physics** (J. Nešetřil and P. Winkler, eds.) DIMACS Series in Discrete Mathematics and Theoretical Computer Science, Volume 63 (2004) 105 – 112.
29. D. Hartvigsen, P. Hell, and J. Szabo, The k -piece packing problem, **EuroComb** 2003.
30. L. Gargano, P. Hell, L. Stacho, and U. Vaccaro, Spanning trees with bounded number of vertices, **ICALP** 2002.
31. P. Hell, S. Klein, L.T. Nogueira, F. Protti, Partitioning chordal graphs into independent sets and cliques, *XI Latin-Iberian American Congress of Operations Research*, TEMA Tend. Mat. Apl. Comput. 3 (2002), no. 1, 147–155.

32. P. Hell, S. Klein, F. Protti, and L. Tito, On generalized split graphs, *Electronic Notes in Discrete Mathematics*, (www.elsevier.nl) volume 7 (2001).
33. P. Hell, Packing in graphs, *Electronic Notes in Discrete Mathematics*, volume 5 (2000).
34. R. Brewster and P. Hell, On homomorphisms to edge-coloured cycles, *Electronic Notes in Discrete Mathematics*, volume 5 (2000).
35. T. Feder, P. Hell, S. Klein, and R. Motwani, Complexity of partition, **SODA** 1999.
36. P. Hell, R. Shamir, and R. Sharan, A fully dynamic algorithm for recognizing and representing proper interval graphs, **ESA** 1999; Springer Lecture Notes in Computer Science 1643 (1999), pp. 527 - 539.
37. T. Feder, P. Hell, S. Klein, and R. Motwani, Complexity of graph partition problems, **STOC** 1999.
38. L. Gargano, P. Hell, and S. Perennes, Colouring paths in directed symmetric trees with applications to WDM routing, **ICALP** 1997; Springer Verlag Lecture Notes in Computer Science, 1256 (1997).
39. B. Beauquier, J-C. Bermond, L. Gargano, P. Hell, S. Perennes, U. Vaccaro, Graph problems arising from wavelength-routing in all-optical networks, 2nd Workshop on Optics and Computer Science **WOCS** 1997.
40. E. Bampis, P. Hell, Y. Manoussakis, and M. Rosenfeld, Finding an antidiirected Hamiltonian path starting with a forward arc from a given vertex of a tournament, Springer Verlag Lecture Notes in Computer Science v. 1120 (1996), Combinatorics and Computer Science (M. Deza, R. Euler, Y. Manoussakis, eds.) pp. 67-73.
41. P. Hell, J. Nesetril, and X. Zhu, Duality of graph homomorphisms, *Combinatorics, Paul Erdos is Eighty* Bolyai Society Mathematical Studies, vol.2, 1996, 271 - 282.
42. J. Bang-Jensen, P. Hell, and J. Huang, Optimal recognition of local tournaments, *Congressus Numerantium* 100 (1994) 141 - 146.
43. J. Bang-Jensen, P. Hell and J. Huang, Local tournaments and proper circular arc graphs, Invited Chapter in **SIGAL**, Springer-Verlag Lecture Notes in Computer Science 450 (1990) 101 - 108.
44. P. Hell and J. Nešetřil, On the existence problem for graph homomorphisms, in **Dirac Memorial Volume, Annals of Discrete Math.** 41 (1989) 255-266.
45. B. Bollobás and P. Hell, Sorting and graphs, Invited Chapter in **Graphs and Order** (I. Rival, ed.), D. Reidel ASI series vol. 147 (1985) 169-184.
46. P. Hell and A. Liestman, Broadcasting in grid graphs with given neighborhood templates, Proc. Second West Coast Conference on Computing in Graph Theory, *Congressus Numer.* 41 (1984) 295-298.
47. M. Farber, G. Hahn, P. Hell, and D.J. Miller, On the complexity of computing the achromatic number, Proc. Fourteenth S.E. Conf. on Combinatorics, Graph Theory and Computing, *Congressus Numer.* 40 (1983) 440-441.
48. P. Hell and D.G. Kirkpatrick, Scheduling, matching, and coloring, in **Alg. Methods in Graph Theory**, (L. Lovász, V.T. Sós, eds.), *Coll. Math. Soc. J. Bolyai* 25 (1981) 273-279.
49. P. Hell, Equibased matroids, *Notes from the N.Y. Graph Theory Day IV*, N.Y. Acad. Sc. (1981) 15-16.
50. R. Häggkvist and P. Hell, Graphs and parallel comparison algorithms, Proc. Eleventh S.E. Conf. on Combinatorics, Graph Theory and Computing, *Congressus Numer.* 29 (1980) 497-509.
51. P. Hell and L.V. Quintas, Partial Joins and graphs with given group, order, and size, Proc. Ninth Southeastern Conf. on Combinatorics, Graph Theory and Computing, Congressus Numer. 21 (1979) 357-371.
52. D.G. Kirkpatrick and P. Hell, On the completeness of a generalized matching problem, Proc. 10th Annual A.C.M. Symposium on Theory of Computing, **STOC** 10 (1978) 240-245.
53. P. Hell, Graphs with given neighborhoods I, in **Problèmes Combinatoires et Théorie des Graphes** (J-C.Bermond et al., eds.), *Colloques internationaux C.N.R.S.* 260 (1978) 219-223.

54. P. Hell, H. Levinson and M. E. Watkins, Some remarks on transitive realizations of graphs, Proc. Second Caribbean Conf. in Combinatorics and Computing (R. C. Read and C. C. Cadogan, eds.), Univ. of West Indies, Cave Hill, Barbados (1977) 115-122.
55. P. Hell and D. J. Miller, On forbidden quotients and the achromatic number, Proc. 5th British Combinatorial Conf., *Congressus Numer.* 15 (1976) 283-292.
56. P. Hell, Graph retractions, in **Teorie Combinatorie** (B. Segre et al., eds.), *Atti dei convegni Lincei* 17 (1976) 263-268.
57. P. Hell, Subdirect products of bipartite graphs, in **Infinite and Finite Sets** (V.T. Sós et al., eds.), *Colloq. Math. Soc. J. Bolyai* 10 (1975) 857-866.
58. P. Hell, On some independence results in graph theory, Invited Chapter in **Alg. Aspects of Combinatorics** (D. Corneil and E. Mendelsohn, eds.), *Congressus Numer.* 13 (1975) 89-122.
59. P. Hell, Retracts in graphs, in **Graphs and Combinatorics**, *Springer-Verlag Lecture Notes in Mathematics* 406 (1974) 291-301.
60. P. Hell and A. Rosa, Handcuffed prisoners and balanced P-designs, Proc. Second Louisiana Conf. on Combinatorics, Graph Theory and Computing (R. C. Mullin et al., eds.) (1971) 283-296.
61. P. Hell and J. Nešetřil, Rigid and inverse-rigid graphs, in **Combinatorial Structures and Their Applications**, (R. K. Guy et al., eds.), Gordon and Breach, New York (1970) 169-171.
62. P. Hell and J. Nešetřil, k-societies with given semigroups, in **Combinatorial Structures and Their Applications**, (R. K. Guy et al., eds.), Gordon and Breach, New York (1970) 301-302.