

# CURRICULUM VITAE

## Dalibor Froncek

### Personal information:

**Address:** Department of Mathematics and Statistics  
University of Minnesota Duluth  
Solon Campus Center 140  
1117 University Drive  
Duluth, MN 55812-3000

**Telephone office:** 218-726-7958

**Telephone home:** 218-348-3309

**Fax:** 218-726-8399

**e-mail:** dfroncek@d.umn.edu

### Education:

Prom.Mat. (M.S. equiv.)	1978	Comenius University Bratislava, Czechoslovakia
RNDr.	1980	Comenius University Bratislava, Czechoslovakia
Diploma in Education	1989	Palacký University Olomouc, Czechoslovakia
CSc. (supervisor Š. Znáám)	1992	Comenius University Bratislava, Slovakia
Ph.D. (supervisor A. Rosa)	1994	McMaster University, Hamilton, Canada

### Scholarships:

Ashbaugh Scholarship	1992	McMaster University
Sherman Scholarship	1992-94	McMaster University

### Awards:

Silver Medal	2001	Silesian University
Outstanding Graduate Faculty Advisor Award 2016	UMD	

### Habilitation:

Docent (Associate Professor)	1996	Masaryk University Brno, Czech Republic
Professor	2002	University of West Bohemia Pilsen, Czech Republic (appointed by the President of the Czech Republic)

### Current Position:

Professor and Director of Graduate Studies, Department of Mathematics and Statistics, University of Minnesota Duluth

### Indefinite tenure and promotion:

Associate Professor	2004	University of Minnesota Duluth
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**Employment History:**

Lecturer	1980–89	University of Mining and Metallurgy Ostrava
Chairman	1989–90	Founding Committee of Silesian University Opava
Senior Lecturer	1990–91	Silesian University Opava
Teaching Assistant	1992–94	McMaster University, Hamilton, Canada
Assistant Professor	1994–96	Technical University Ostrava
Assistant Professor	1994–96	Silesian University Opava (adjunct)
Associate Professor	1996–2000	Technical University Ostrava
Associate Professor	1996–99	Silesian University Opava (adjunct)
Visiting Assistant Professor	2000–01	University of Vermont
Assistant Professor	2001–04	University of Minnesota Duluth
Associate Professor	2004–07	University of Minnesota Duluth

**Teaching Experience (Courses Taught):**

**University of Mining and Metallurgy:** Calculus, Linear Algebra for Engineering

**Silesian University:** Graph Theory, Combinatorial Methods, Coding Theory

**TU Ostrava:** Graph Theory, Methods of Discrete Mathematics, Linear Algebra, Combinatorics, Coding Theory

**University of Vermont:** Combinatorial Graph Theory, Introductory Calculus, Calculus, Basic Combinatorial Theory, Applied Mathematics for Engineers and Scientists (Differential Equations), Precalculus

**University of Minnesota Duluth:**

Fall 2001:	MATH 5365 Graph Theory
Spring 2002:	MATH 3355 Discrete Mathematics, MATH 5366 Enumerative Combinatorics
Fall 2002:	MATH 3355 Discrete Mathematics, MATH 5365 Graph Theory
Spring 2003:	MATH 3355 Discrete Mathematics, MATH 5372 Abstract Algebra II
Fall 2003:	MATH 3355 Discrete Mathematics, MATH 5365 Graph Theory
Spring 2004:	MATH 1296 Calculus I, MATH 5327 Advanced Lin Algebra, MATH 1234 Freshman Seminar
Summer 2004:	MATH 1296 Calculus I
Fall 2004:	no courses (Single Semester Leave)
Spring 2005:	MATH 3355 Discrete Mathematics, MATH 5327 Advanced Linear Algebra
Summer 2005:	MATH 1296 Calculus I
Fall 2005:	MATH 1296 Calculus I, MATH 1596 Honors Calculus I, MATH 5365 Graph Theory
Spring 2006:	MATH 1597 Honors Calculus II,
Summer 2006:	MATH 1297 Calculus II
Fall 2006:	MATH 1596 Honors Calc I, MATH 4371 Intro to Abstract Algebra, MATH 5365 Graph Theory
Spring 2007:	no courses
Summer 2007:	MATH 1297 Calculus II
Fall 2007:	MATH 3355 Discrete Mathematics, MATH 5365 Graph Theory, MATH 5991 Independent Study (Design Theory, 2 credits)
Spring 2008:	MATH 3355 Discrete Mathematics, STAT 1411 Intro to Statistics (both courses taught in “Study in England Programme”)
Summer 2008:	MATH 1296 Calculus I
Fall 2008:	MATH 4371 Intro to Abstract Algebra, MATH 5365 Graph Theory
Spring 2009:	sabbatical
Summer 2009:	MATH 1296 Calculus I

Fall 2009: MATH 1596 Honors Calculus I, MATH 5365 Graph Theory  
Spring 2010: MATH 1597 Honors Calculus II, MATH 1296 Calculus I  
Summer 2010: MATH 3355 Discrete Mathematics  
Fall 2010: MATH 4371 Intro to Abstract Algebra, MATH 5366 Enumerative Combinatorics  
Spring 2011: MATH 5365 Graph Theory  
Summer 2011: MATH 3355 Discrete Mathematics  
Fall 2011: MATH 4371 Intro to Abstract Algebra, MATH 3355 Discrete Mathematics  
Spring 2012: MATH 5365 Graph Theory  
Summer 2012: MATH 3355 Discrete Mathematics  
Fall 2012: MATH 1596 Honors Calculus I, MATH 3355 Discrete Mathematics  
Spring 2013: MATH 5365 Graph Theory, MATH 3355 Discrete Mathematics  
Summer 2013: MATH 1296 Calculus I  
Fall 2013: MATH 1597 Honors Calculus II, MATH 3355 Discrete Mathematics  
Spring 2014: MATH 5365 Graph Theory  
Summer 2014: MATH 1296 Calculus I  
Fall 2014: MATH 5366 Enumerative Combinatorics, MATH 1296 Calculus I  
Spring 2015: MATH 5365 Graph Theory  
Summer 2015: MATH 3355 Discrete Mathematics  
Fall 2015: MATH 1296 Calculus I, MATH 3355 Discrete Mathematics  
Spring 2016: MATH 5365 Graph Theory  
Summer 2016: MATH 3355 Discrete Mathematics  
Fall 2017: MATH 5366 Enumerative Combinatorics, MATH 3355 Discrete Mathematics  
Spring 2017: MATH 5365 Graph Theory  
Summer 2017: MATH 1296 Calculus I

**Graduate Students:**

Roman Macháček	2001	(Ph.D., Technical University Ostrava)
Clay Swanson	2003	(M.S., UMD)
Michael Kubesa	2004	(Ph.D., Technical University Ostrava)
Petr Kovář	2004	(M.S., UMD)
Tereza Kovářová	2004	(M.S., UMD)
Petr Kovář	2004	(Ph.D., Technical University Ostrava)
Tereza Kovářová	2004	(Ph.D., Technical University Ostrava)
Wei Lin	2006	(M.S., UMD) (co-advisor with Zhuangyi Liu)
Jerimi Walker	2008	(M.S., UMD)
Kristin Riesgraf	2011	(M.S., UMD)
Ann Literski	2011	(M.S., UMD)
Steve Balamut	2012	(M.S., UMD)
Jacob Yunker	2012	(M.S., UMD)
Ondrej Zjevik	2014	(M.S., UMD) (co-advisor with John Greene)
Michael Lillegard	2014	(M.S., UMD)
Inne Singgih	2015	(M.S., UMD) (co-advisor with Sylwia Cichacz)
Aaron Shepanik	2015	(M.S., UMD) (co-advisor with Petr Kovar)
Ian McGahan	2015	(M.S., UMD) (co-advisor with Sylwia Cichacz)
Michael Ross	2017?	(M.S., UMD) (co-advisor with Steven Rosenberg)
Jerad DeVries	2017?	(M.S., UMD) (co-advisor with Petr Kovar)
John Fahnenstiel	2015	(M.S., UMD) (co-advisor with Tereza Kovarova)
Soleh Dib	2015	(M.S., UMD) (co-advisor with B. Peckham)
Bryan Freyberg	2017	(Ph.D., Michigan Tech, Houghton, MI) (co-advisor with M. Keranen)
Michael McKeown	2017	(M.S., UMD)

Sylwia Cichacz 2007–08 Visiting Fulbright Junior Scholar (AGH-UST Krakow)

**Undergraduate Students Advised:**

Tyler Olson	2002–2003	(UROP project)
Karl Wimmer	2003–2004	(UROP project)
Riitta Schaeublin	2005–2006	(UROP project)
Leah Tolefson	2009–2010	(UROP project)
Moses Koppendryer	2012–2013	(UROP project)
Penghuan Ni	2013–2014	(UROP project)
O'Neill Kingston	2014–2015	(UROP project)
Yichen Wei	2017–2018	(UROP project)

**Research Visits:**

1995	University of Central Lancashire, Preston, England
1996, 1997	University of Mining and Metallurgy, Kraków, Poland
2000–2001	University of Vermont (sabbatical)
2003–2013	AGH-UST, Kraków, Poland (repeated short visits, 1–2 per year)
2006	St. Michael's College, Colchester, Vermont
2007	Illinois State University, Normal, Illinois
2007	University of Ballarat, Australia
2014	One week in Opava, Czech Republic. Worked with Sylwia Cichacz from AHG-UST Krakow, Poland on two separate research projects.
2016	One week in Opava, Czech Republic. Worked with Sylwia Cichacz from AHG-UST Krakow, Poland on a problem in magic type labelings of product of odd number of odd cycles.

## Publications:

### A. Dissertations:

1. *Pseudomedians in graphs*, RNDr. thesis, Comenius University Bratislava, 1980
2. *Graphs with given neighbourhoods*, CSc. dissertation, Comenius University Bratislava, 1992.
3. *Decompositions of complete multipartite graphs and group divisible designs into isomorphic factors*, Ph.D. dissertation, McMaster University, Hamilton, 1994.

### B. Articles in refereed journals:

1. *Locally linear graphs*, Math. Slovaca, **39**, 1989, pp. 3–6.
2. *Locally path-like graphs*, Čas. pěst. mat., **114**, 1989, pp. 176–180.
3. *Graphs with a given edge neighbourhood*, Czechoslovak Math. Journ., **39**, 1989, pp. 627–63.
4. *On graphs with prescribed edge neighbourhoods*, CMUC, **30**, 1989, pp. 749–754.
5. *Graphs with near  $v$ - and  $e$ -neighbourhoods*, Glasgow Math. Journ., **32**, 1990, pp. 197–199.
6. *Edge realizable graphs with universal vertices*, Glasgow. Math. Journ., **33**, 1991, pp. 309–310.
7. *Graphs with constant neighbourhoods of two independent vertices*, Quart. Journ. of Math. Oxford (2), **43**, 1992, pp. 313–317.
8.  *$e$ -Locally acyclic graphs*, Applicationes Mathematicae, **21**, 3, 1992, pp. 437–440.
9.  *$e$ -Realization of double-stars*, Discr. Math., **126**, 1994, pp. 399–402.
10. *Graphs with dense constant neighbourhoods*, JCMCC, **18**, 1995, pp. 145–150.
11. *Testing samples of three independent groups*, Radioengineering, **4**, 1995, No. 4, pp. 16–19.
12. *Decompositions of complete multipartite graphs into selfcomplementary factors with finite diameters*, Australas. J. Combin., **13**, 1996, pp. 61–74.
13. (with A. Rosa and J. Širáň), *The existence of self-complementary circulant graphs*, Europ. J. Combinatorics, **17**, 1996, pp. 625–628.
14. *Decompositions of complete bipartite and tripartite graphs into selfcomplementary factors with finite diameters*, Graphs Combin., **12**, 1996, pp. 305–320.
15. *Almost self-complementary factors of complete bipartite graphs*, Discr. Math., **167/168**, 1997, pp. 317–327.
16. *Decompositions of complete multipartite graphs into disconnected selfcomplementary factors*, Utilitas Mathematica, **53**, 1998, pp. 201–216.
17. *2-halvable complete 4-partite graphs*, Discussiones Mathematicae Graph Theory, **18** (2), 1998, pp. 233–242.
18. *Note on cyclic decompositions of complete bipartite graphs into cubes*, Discussiones Mathematicae Graph Theory, **19** (2), 1999, pp. 219–227.
19. *Disconnected self-complementary factors of almost complete tripartite graphs*, Utilitas Mathematica, **56**, 1999, pp. 107–116.
20. (with M. Meszka) *Halving transversal designs*, J. Comb. Designs, **8** (2), 2000, pp. 83–99.
21. (with J. Širáň) *Halving complete 4-partite graphs*, Ars Combinatoria, **55**, 2000, pp. 43–63.
22. (with A. Rosa) *Symmetric graph designs on friendship graphs*, J. Comb. Designs, **8** (3), 2000, pp. 201–206.
23. *Note on seed graphs with components of given order*, AMUC, **LXIX** (1), 2000, 77–83.

24. *Range of diameters of complementary factors of almost complete tripartite graphs*, *Utilitas Mathematica*, **57** (2000), pp. 211–225.
25. (with J.H. Dinitz) *Scheduling the XFL*, *Congressus Numerantium*, **147**, 2000, pp. 5 – 15.
26. (with M. Kubesa) *Note on a multiple-key multiple-lock security problem*, *Transactions of the Technical University Ostrava*, **I (1)**, 2001, pp. 77–84.
27. (with F. Franek and A. Rosa) *Imbalance in tournament designs*, *Australas. J. Combin.*, **23**, 2001, pp. 237–251.
28. *On seed graphs with more than two components*, *Discr. Math.*, **233** (1–3), 2001, pp. 115–126.
29. *Self-complementary factors of almost complete tripartite graphs of even order*, *Discr. Math.*, **236** (1–3), 2001, pp. 111–122.
30. *Scheduling Czech National Basketball League*, *Congressus Numerantium*, **153**, 2001, pp. 5–24.
31. *3-halvable almost complete tripartite graphs*, *Opuscula Mathematica*, **21**, 2001, pp. 43–57.
32. *Cyclic type factorizations of complete bipartite graphs into hypercubes*, *Australas. J. Combin.*, **25**, 2002, pp. 201–209.
33. (with M. Kubesa) *Factorizations of complete graphs into spanning trees*, *Congressus Numerantium*, **154**, 2002, pp. 125–134.
34. (with D. Archdeacon, R. Jajcay, J. Širáň, Z. Ryjáček) *Regular clique covers of graphs*, *Australas. J. Combin.*, **27**, 2003, pp. 307–316.
35. (with Z. Ryjáček and Z. Skupień) *On traceability and 2-factors in claw-free graphs*, *Discussiones Mathematicae Graph Theory*, **24** (2004), 55–71.
36. *Cyclic decompositions of complete graphs into spanning trees*, *Discussiones Mathematicae Graph Theory*, **24** (2004), 345–353.
37. (with D. Archdeacon, J. Ellis-Monaghan, D. Fisher, P.C.B. Lam, S. Seager, B. Wei, and R. Yuster) *Some remarks on domination*, *Journal of Graph Theory*, **46 Vol. 3** (2004), 207–210.
38. (with S. Winters) *Another class of gracious bipartite graphs*, *Congressus Numerantium*, **168** (2004), 65–70.
39. (with T. Kovarova and P. Kovar) *Vertex magic total labeling of products of cycles*, *Australas. J. Combin.*, **33** (2005), 169–181.
40. *Orthogonal double covers of complete graphs by lobsters of diameter 4*, *Congressus Numerantium*, **177** (2005), 25–32.
41. (with B. Stevens) *Another Anti-Oberwolfach Solution: Pancomponented 2-factorizations of complete graphs*, *Discr. Math.*, **299** (2005), 99–112.
42. *Note on factorizations of complete graphs into caterpillars with small diameters*, *JCMCC*, **57** (2006), 179–186.
43. (with U. Leck) *Orthogonal double covers of complete graphs by fat caterpillars*, *Discussiones Mathematicae—Graph Theory*, **26** (2006), 343–350.
44. (with T. Kovarova and P. Kovar) *Fair incomplete tournaments*, *Bull. ICA*, **48** (2006), 31–33.
45. (with J. Jerebic, S. Klavzar, and P. Kovar) *Strong isometric dimension, biclique coverings, and Sperner's Theorem*, *Combinatorics, Probability, and Computing*, **16 (02)** (2007), 271–275.
46. (with M. Meszka) *The Cheesecake Factory Problem*, *Congressus Numerantium*, **182** (2006), 5–10.
47. *Bi-cyclic decompositions of complete graphs into spanning trees*, *Discr. Math.*, **303** (2007), 1317–1322.
48. (with T. Kovarova) *2n-cyclic labeling of graphs*, *Ars Combinatoria*, **83** (2007), 129–144.

49. *Orthogonal double covers of complete graphs by caterpillars of diameter 5*, Graphs and Combinatorics, **23(2)** (2007), 145–163.
50. (with S. Bezrukov, P. Kovar, and S. Rosenberg) *On biclique coverings*, Discr. Math., **308** (2008), 319–323.
51. *Fair incomplete tournaments with odd number of teams and large number of games*, Congressus Numerantium, **187** (2007), 83–89.
52. *Product rosy labeling of graphs*, Discussiones Mathematicae—Graph Theory **28** (3) (2008), 431–440.
53. *Orthogonal double covers of complete graphs by lobsters of diameter 5*, JCMCC, **66** (2008), 129–134.
54. *Oberwolfach rectangular table negotiation problem*, Discr. Math. **309** (2009), 501–504.
55. *Recent advances in Rosa-type labeling of graphs* (invited survey paper), AKCE International Journal of Graphs and Combinatorics **6(1)** (2009), 69–78.
56. (with S. Cichacz) *Factorization of  $K_{n,n}$  into  $(0, j)$ -prisms*, Information Processing Letters **109** (2009), 932–934.
57. (with S. Cichacz, A. Khodkar, and Wenjie Xu) *Super edge-graceful labeling of paths*, Bull. ICA **57** (2009), 79–90.
58.  $\alpha_2$ -*labeling of graphs*, Opuscula Mathematica, **29(4)** (2009), 393–397.
59. (with K.A. Sugeng, M. Miller, J. Ryan, J. Walker) *On distance magic labeling of graphs*, Journal of Combinatorial Mathematics and Combinatorial Computing, **71** (2009), 39–48.
60. *Cyclic decompositions of complete graphs into  $K_{k,m}+e$ : The missing case*, Congressus Numerantium, **198** (2009), 111–118.
61. (with P. Kovar, T. Kovarova, and M. Kubesa) *Factorizations of complete graphs into caterpillars of diameter 5*, Discr. Math. **310** (2010), 537–556.
62. (with P. Kovar and M. Kubesa) *Decomposition of complete graphs into blown-up cycles  $C_m[2]$* , Discr. Math., **310** (2010) 1003–1115.
63. *Decomposition of complete graphs into small rosy graphs*, Opuscula Mathematica, **30/3** (2010), 277–280.
64. (with S. Cichacz) *Bipartite graphs decomposable into closed trails*, J. Combin. Math. Combin. Comput. **74** (2010), 207–216.
65. (with M. Meszka) *Factorizations of complete graphs into long double brooms*, Congressus Numerantium, **206** (2010), 151–155.
66. (with P. Kovar and M. Kubesa) *Factorizations of complete graphs into trees with at most four non-leave vertices*, Graphs and Combinatorics, **27** (2011), 621–646.
67. (with M. Kubesa) *Rectangular negotiating table problem revisited*, Cent. Eur. J. Math. **9(5)** (2011), 1114–1120.
68. (with P. Kovar and T. Kovarova) *Constructing distance magic graphs from regular graphs*, J. Combin. Math. Combin. Comput. **78** (2011), 349–354.
69. (with L. Tollefson) *Decompositions of complete graphs into kayak paddles with two odd cycles*, Congressus Numerantium, **207** (2011), 161–169.
70. (with L. Tollefson) *Decompositions of complete graphs into kayak paddles*, Journal of the Indonesian Mathematical Society, Special Edition 2011, 39–44.
71. (with S. Arumugam and N. Kamatchi) *Distance Magic Graphs—A Survey*, Journal of the Indonesian Mathematical Society, Special Edition 2012, 11–26.
72. (with P. Kovar and T. Kovarova) *A note on 4-regular distance magic graphs*, Australasian J. of Combinatorics, **54** (2012), 127–132.



73. (with S. Cichacz and M. Meszka) *Decomposition of complete graphs into small bipartite prisms*, Congressus Numerantium, **211** (2012), 133–140.
74. (with S. Cichacz and P. Kovar) *Decomposition of complete bipartite graphs into generalized prisms*, European J. of Combinatorics, **34** (2013), 104–110.
75. *Group distance magic labeling of  $C_k \square C_m$* , Australasian J. of Combinatorics, **55** (2013), 167–174.
76. *Handicap distance antimagic graphs and incomplete tournaments*, AKCE Int. J. Graphs Comb., **10**, No. 2 (2013), 119–127.
77. (with G.A. Saputri and K.A. Sugeng) *The odd harmonious labeling of dumbbell and generalised prism graphs*, AKCE Int. J. Graphs Comb., **10**, No. 2 (2013), 221–228.
78. (with S. Cichacz and M. Meszka) *Decomposition of complete graphs into small generalized prisms*, AKCE International Journal of Graphs and Combinatorics **10** No. 3 (2013), 285–293.
79. *Incomplete tournaments and handicap distance antimagic graphs*, Congressus Numerantium, **217** (2013), 93–99.
80. (with A. Hlavacek, and S. Rosenberg) *Edge reconstruction and the swapping number of a graph*, Australasian J. of Combinatorics, **58** (2014), 1–15.
81. (with S. Cichacz and S. Dib) *Decomposition of complete graphs into  $(0, 2)$ -prisms*, Czechoslovak Math. J., **64** (139) (2014), 37–43.
82. (with O. Kingston, K. Vezina) *Alpha labelings of straight simple polyominal caterpillars*, Congressus Numerantium **222** (2014), 57–64.
83. (with S. Cichacz, K. Sugeng, Sanming Zhou) *Group distance magic and antimagic graphs (extended abstract)*, Electronic Notes in Discrete Mathematics **48** (2015) 41–48.
84. (with S. Cichacz) *Distance magic circulant graphs*, Discrete Math, **339** (2016), 84–94.
85. *Alpha labelings of full hexagonal caterpillars*, AKCE Int. J. Graphs. Comb., **13** (2016), 85–89.
86. (with S. Cichacz, E. Krop, C. Raridan) *Distance magic Cartesian products of graphs*, Discussiones Mathematicae—Graph Theory, **36** (2) (2016), 299–308.
87. (with A. Shepanik) *Regular handicap tournaments of high degree*, J. Algebra Comb. Discrete Struct. Appl., **3**(3), 2016, 159–164.
88. (with S. Cichacz, K. Sugeng, Sanming Zhou) *Group distance magic and antimagic graphs (full paper)*, Acta Mathematica Sinica, **32**(10) (2016), 1159–1176.
89. *Regular incomplete tournaments with handicap two*, Congressus Numerantium, **227** (2016), 277–285.
90. (with S. Cichacz and I. Singgih), *Vertex magic total labelings of 2-regular graphs*, Disc. Math., **340** (2017), 3117–3124.
91. *Decomposition of certain complete bipartite graphs into prisms*, Discussiones Mathematicae—Graph Theory, **37** (2017), 55–62.
92. *Magic rectangle sets of odd order*, Australas. J. Combin., **67**(2) 2017, 345–351.
93. *A note on incomplete regular tournaments with handicap two of order  $n \equiv 8 \pmod{16}$* , Opuscula Mathematica, **37**(4) 2017, 557–566.
94. (with P. Kovar, T. Kovarova, B. Krajc, M. Kravcenko, A. Shepanik, A. Silber) *On regular handicap graphs of even order*, Electronic Notes in Discrete Mathematics **60** (2017), 69–76.
95. (with P. Kovar and T. Kovarova) *Note on a conjecture of Marimuthu et al.*, 1 page, J. Graph Labeling, submitted December 2015, accepted February 2016
96. *Regular handicap graphs of odd order*, J. Combin. Math. Combin. Comput., **102** (2017), 253–266.
97. (with W. Keith and D. Kreher) *On nearly platonic graphs*, Astralasian J. Combin., **70**(1) (2017), 86–103.

98. *Full spectrum of regular incomplete 2-handicap tournaments of order  $n \equiv 0 \pmod{16}$* , 9 pages, submitted to J. Combin. Math. Combin. Comput. January 2017, accepted August 2017
99. (with S. Cichacz-Przenioslo and B. Freyberg) *Orientable  $Z_n$ -distance magic graphs*, submitted to *Discussiones Mathematicae—Graph Theory*, February 2017, accepted September 2017

### C. Articles in Conference Proceedings (refereed):

100. *Realizability of some starlike trees*, Fourth Czechoslovakian Symposium on Combinatorics, Graphs and Complexity, Elsevier Science Publishers, 1992, 81–83.
101. *Parallel testing of two triples*, DDECS '97 (Proceedings of the International Conference on Design and Diagnostics of Electronic Circuits and Systems), 1997, 127–131.
102. *Neighbourhood-symmetric graphs*, Proceedings of the Seventh International Conference in Graph Theory, Combinatorics, Algorithms and Applications, John Wiley and Sons, 1995, 413–424.
103. *Note on a halvable group divisible design*, Proceedings of the International Conference "60th Anniversary of the Faculty of Civil Engineering at the Slovak Technical University", 1998, 197–200.
104. (with M. Cohen and C. Colbourn) *Cluttered orderings for the complete graph*, COCOON 2001, Guilin, China, Lecture Notes in Computer Science 2108 (2001), 420–431.
105. (with M. Meszka) *Round Robin Tournaments with No Breaks in Home-Away Patterns (extended abstract)*, Proceedings of MISTA 2003 — The 1st Multidisciplinary International Conference on Scheduling: Theory and Applications, Nottingham, UK (2003), 602–603.
106. (with M. Meszka) *Round robin tournaments with one bye and no breaks in home-away patterns are unique*, in: *Multidisciplinary Scheduling: Theory and Applications* (Graham Kendall, Edmund K. Burke, Sanja Petrovic, Michel Gendreau; eds.) Springer, (2005), 331–340.
107. (with P. Kovar and M. Kubesa) *Spanning factors with a given diameter and their application in ad-hoc networks*, extended abstract, Proceedings of the International Conference on Mathematics and Computer Science 2009, Chennai, India, Scitech Publications (India) PVT. Ltd (2009), INV 12–17.
108. (with S. Cichacz and P. Kovar) *Note on decomposition of  $K_{n,n}$  into  $(0, j)$ -prisms (Extended Abstract)*, Proceedings of IWOCA 09 (International Workshop on Combinatorial Algorithms, Hradec nad Moravici 2009), 199–204.
109. (with S. Cichacz and P. Kovar) *Note on decomposition of  $K_{n,n}$  into  $(0, j)$ -prisms, (full paper)*, in: J. Fiala, J. Kratochvil, M. Miller (Eds.) IWOCA 2009, Lecture Notes in Computer Science 5874, Springer-Verlag, Berlin Heidelberg, 125–133.
110. (with A. Shepanik, P. Kovar, M. Kravcenko, A. Silber, T. Kovarova, B. Krajc) *On regular handicap graphs of even order (survey paper)*, in: *9th International Workshop on Graph Labelings (IWOGL 2016)*, Electron. Notes Discrete Math. **60**, Elsevier Sci. B. V., Amsterdam, 2017, 69–76.

### D. Book Chapters:

111. (with J. Dinitz, E. Lamken, W. Wallis) *Scheduling a Tournament*, section in "The CRC Handbook of Combinatorial Designs", C. Colbourn, J. Dinitz (Eds.), CRC Press, 2006
112. *Scheduling a Tournament*, chapter in "Mathematics and Sports" (Joseph A. Gallian, Ed.), Dolciani Mathematical Expositions #43, Mathematical Association of America, 2010

### E. Submitted Articles:

113. (with J. McKeown, J. McKeown, M. McKeown) *Vertex-magic edge  $Z_{2nm}$ -labeling of  $C_n \times C_m$* , 15 pages, submitted to *Australasian J. Combin.*, September 2017.
114. (with A. Shepanik) *Regular handicap graphs of order  $n \equiv 0 \pmod{8}$* , submitted to *El. J. Graph Th. Applic.*, 8 pages, November 2017.

**F. Technical Reports:**

115. *Improved draw tables*, Technical Report, Czech Soccer Association, 1998 (19 pages).
116. *Construction of improved draw tables for sports competitions scheduling*, Technical Report, Technical University Ostrava, 1998 (24 pages).
117. *UEFA CUP — Outline of the new rules for the compilation of the ranking list and the coefficients for seeding*, Technical Report, Technical University Ostrava, 1998 (8 pages).

**G. Textbooks:**

*Introduction to Graph Theory (in Czech)*, Silesian University Opava, 1999.

**Invited Lectures:**

- |      |                  |   |
|------|------------------|---|
| 2002 | Houghton         | <i>Balanced schedules of round robin tournaments</i> , Michigan Technological University, Mathematical Sciences Awards Banquet  |
| 2003 | Las Vegas        | <i>So you want to schedule a tournament...</i> , The Seventeenth Midwest Conference on Combinatorics, Cryptography and Computing  |
| 2004 | Vysne Ruzbachy   | <i>Incomplete and non-compact round robin tournaments</i> , Czech-Slovak Conference GRAPHS 2004   |
| 2006 | Banska Bystrica  | <i>Non-traditional round robin tournaments</i> , Matej Bel University, Banska Bystrica, Slovakia  |
| 2007 | Brno             | <i>Want to schedule an (un)fair tournament</i> , Masaryk University, Brno, Czech Republic   |
| 2008 | Pilsen           | <i>Magic-type labelings and tournament scheduling</i> , Combinatorics Seminar of the Department of Mathematics, University of West Bohemia in Pilsen, Czech Republic  |
| 2008 | Krynica          | <i>Labelings and decompositions</i> , Kraków Workshop on Graph Theory "3 in 1"  |
| 2009 | Chennai          | <i>Spanning factors with a given diameter and their applications to ad-hoc networks</i> , invited lecture, 2 <sup>nd</sup> International Conference on Mathematics and Computer Science, Loyola College, Chennai, India   |
| 2009 | Tamil Nadu       | <i>Recent advances in Rosa-type labelings of graphs</i> , invited lecture, 5 <sup>th</sup> International Workshop on Graph Labelings 2009, Kalasalingam University, India   |
| 2010 | Cochin           | <i>Incomplete round-robin tournaments and distance magic labelings</i> , invited lecture, Special Session on Graph Labelings at the Satellite Conference of the International Congress of Mathematicians "International Conference on Recent Trends in Graph Theory and Combinatorics", Cochin, India |
| 2011 | Las Vegas        | <i>Group distance magic labelings</i> , keynote lecture, 25 <sup>th</sup> Midwestern Conference on Combinatorics, Cryptography, and Computing in Las Vegas  |
| 2011 | Krynica          | <i>Distance magic and group distance magic graphs</i> , 20 <sup>th</sup> International Workshop on Graph Theory "3 in 1" Krynica, Poland  |
| 2012 | Puncak           | <i>Latest developments in distance magic labeling</i> , invited lecture, 7th International Workshop on Graph Labelings 2012, Hotel Seruni, Puncak, Indonesia  |
| 2015 | Bozi Dar         | <i>Kotzig arrays three generations later</i> , 50th Czech-Slovak Conference GRAPHS 2015   |
| 2015 | Houghton, MI     | <i>Distance magic and group distance magic graphs</i> , invited lecture, Discrete Mathematics Seminar at Michigan Technological University, Houghton, MI  |
| 2016 | Winnipeg, Canada | <i>Rosa-type labelings, graph decompositions and factorizations</i> , invited lecture, 2 <sup>nd</sup> MMMM Combinatorics Graduate Student Workshop, University of Manitoba, Winnipeg, Canada   |
| 2017 | Hamilton, Canada | <i>Decompositions of complete graphs and complete bipartite graphs into generalized prisms</i> , Advanced Optimization Laboratory invited seminar, McMaster University, Hamilton, ONT, Canada   |

**Conference Talks:**

- 1985 Luhačovice *Locally acyclic graphs*, Czechoslovak Conference on Graph Theory
- 1986 Račková dolina *Locally linear graphs*, Czechoslovak Conference on Graph Theory
- 1987 Domažlice *Graphs with cyclic edge-neighbourhood*, Czechoslovak Conference on Graph Theory
- 1988 Čertov *Graphs with given  $i$ -neighbourhood*, Czechoslovak Conference on Graph Theory
- 1989 Hrubá Skála *Graphs with near  $v$ - and  $e$ -neighbourhoods*, Czechoslovak Conference on Graph Theory
- 1990 Prachatice *Realizability of some starlike trees*, Fourth Czechoslovak Symposium on Combinatorics
- 1991 Zemplínská Šírava  *$e$ -realization of some trees*, Czechoslovak Conference on Graph Theory
- 1992 Kalamazoo *Neighbourhood-symmetric graphs*, Seventh Quadrennial Conference on the Theory and Applications of Graphs
- 1992 Kingston *On the existence of neighbourhood-symmetric graphs*, Ontario Combinatorial Workshop
- 1993 Waterloo *Selfcomplementary factors of complete multipartite graphs with given diameter*, Ontario Combinatorial Workshop
- 1994 Boca Raton *Decompositions of complete multipartite graphs into selfcomplementary factors with given diameters*, Twenty-Fifth Southeastern International Conference on Combinatorics, Graph Theory, and Computing
- 1995 Leoben *Decompositions of complete bipartite graphs into cubes*, Budapest-Ljubljana-Leoben Meeting on Graph Theory
- 1995 Herl'any *Decompositions of  $K(d2^{d-3}, d2^{d-3})$  into  $d$ -dimensional cubes*, Czech-Slovak Conference on Graph Theory
- 1995 Stirling *Halving unhalvable graphs*, 15th British Combinatorial Conference
- 1995 Ostrava *Decompositions of complete multipartite graphs into almost selfcomplementary factors with given diameters*, International Conference on the Occasion of the 50th Anniversary of Moving the University of Mining and Metallurgy to Ostrava
- 1995 Rožnov pod Radhoštěm *Testing samples of three independent groups*, Design and Diagnostics of Electronic Circuits and Systems
- 1995 Kraków *Halving complete multipartite graphs*, Kraków Workshop on Graph Theory
- 1996 Soláň *On a problem of decompositions of complete four-partite graphs into selfcomplementary factors*, Czech-Slovak Conference on Graph Theory
- 1996 Stará Lesná *Cycles in transversal designs*, International Workshop on Cycles and Colourings
- 1996 Kraków *Seed graphs with more than two components*, Kraków Workshop on Graph Theory
- 1997 Chudenice *Halving biregular complete 4-partite graphs*, Czech-Slovak Conference on Graph Theory
- 1997 Soláň *Parallel testing of two triples*, Design and Diagnostics of Electronic Circuits and Systems

- 1997 Kazimierz Dolny *Self-complementary factors of almost complete tripartite graphs of even order*, Kraków Conference on Graph Theory
- 1998 Praha *On seed graphs with more than two components*, Fifth Czech-Slovak Symposium on Combinatorics, Graph Theory, Algorithms and Applications
- 1998 Stará Lesná *On two problems on graph colourings*, International Workshop on Cycles and Colourings
- 1998 Braunschweig *2-halvable complete 4-partite graphs*, Kolloquium über Kombinatorik
- 1998 Bratislava *Halvable group divisible designs* International Conference "60th Anniversary of the Faculty of Civil Engineering at the Slovak Technical University"
- 1998 Krynica *Cyclic factorizations of complete bipartite graphs into cubes*, Kraków Workshop on Graph Theory "3 in 1"
- 1999 Kočovce *On symmetric graph designs*, Slovak-Czech Conference GRAPHS 99
- 1999 Bled *Scheduling Czech National Basketball League*, Fourth Slovene International Conference in Graph Theory
- 1999 Canterbury *Symmetric graph designs on friendship graphs*, 17th British Combinatorial Conference
- 1999 Gronów *How to schedule a basketball league*, VII Workshop '99: Optimal Control and Graph Theory
- 1999 Kraków *Distinguishable clique coverings of graphs*, VIII. Workshop on Graph Theory „3in1“
- 2000 Boca Raton *Scheduling XFL*, Thirty-First Southeastern International Conference on Combinatorics, Graph Theory, and Computing
- 2000 Lipt. Trnovec *Imbalance in tournament designs*, Slovak-Czech Conference GRAPHS 2000
- 2000 Kalamazoo *Cyclic type decompositions of complete bipartite graphs into hypercubes* The Ninth Quadrennial International Conference in Graph Theory, Combinatorics, Algorithms, and Applications
- 2000 Burnaby *Encoding the hypercube and/or decoding the complete bipartite graph*, PIMS Workshop on Graph Decompositions
- 2001 Baton Rouge *Scheduling the Czech National Basketball League*, Thirty-Second Southeastern International Conference on Combinatorics, Graph Theory, and Computing
- 2002 Prague *Crawling Graphs and Data Back-Up*, DIMATIA Graph Theory Day
- 2002 Boca Raton *Factorizations of complete graphs into spanning trees*, Thirty-third Southeastern International Conference on Combinatorics, Graph Theory, and Computing
- 2002 Rejvíz *Decompositions of complete graphs of even order into isomorphic spanning trees*, Slovak-Czech Conference GRAPHS 2002
- 2002 Maratea *Bi-cyclic factorizations of complete graphs into spanning trees*, Combinatorics 2002
- 2002 Czorsztyn *Bi-cyclic decompositions of complete graphs into spanning trees*, 4th Cracow Conference on Graph Theory
- 2002 Normal *Cyclic decompositions of complete graphs into spanning trees*, MIGHTY XXXV
- 2002 Carbondale *Packing Trees into Complete Graphs*, The Sixteenth Midwest Conference on Combinatorics, Cryptography and Computing

- 2003 Burnaby *Another Anti-Oberwolfach Solution: Pancomponented 2-factorizations of Complete Graphs*, Graph Theory of Brian Alspach International Conference on the Occasion of the 65th Birthday of BA
- 2003 Oshkosh *Non-traditional round robin tournaments*, MIGHTY XXXVI
- 2003 Javorna *Vertex magic total labelings of products of graphs*, Czech-Slovak Conference GRAPHS 2003
- 2003 Bled *Magic type labelings and tournament scheduling*, 5th Slovenian International Conference on Graph Theory
- 2003 Zilina *Non-compact and incomplete round robin tournaments*, International Mathematical Conferences on the occasion of 50-th anniversary of foundation of University of Žilina
- 2003 Nottingham *Round Robin Tournaments with No Breaks in Home-Away Patterns*, MISTA 2003 — The 1st Multidisciplinary International Conference on Scheduling: Theory and Applications
- 2003 Valparaiso *Regular Clique Covers of Graphs*, MIGHTY XXXVII
- 2003 Vancouver *Factorizations of complete graphs into spanning trees*, Winter Meeting of the CMS
- 2004 Prague *Factorizations of complete graphs into caterpillars*, DIMATIA Graph Theory Day
- 2004 Boca Raton *Factorizations of complete graphs into short caterpillars*, Thirty-fifth Southeastern International Conference on Combinatorics, Graph Theory, and Computing
- 2004 Acireale *Coverings of  $K_{n,n} - M$  by bicliques*, Combinatorics 2004
- 2004 Zakopane *Non-traditional round robin tournaments*, Discrete Mathematics (international workshop), Poland
- 2004 Krynica *Orthogonal double covers of complete graphs by caterpillars with diameter 5* Kraków Workshop on Graph Theory "3 in 1"
- 2005 Boca Raton *Orthogonal double covers of complete graphs by caterpillars*, Thirty-sixth Southeastern International Conference on Combinatorics, Graph Theory, and Computing
- 2005 Saginaw *New methods for orthogonal double covers of complete graphs*, MIGHTY XL
- 2005 Budmerice *Oberwolfach Rectangular Table Negotiation Problem*, XL Czech-Slovak Conference GRAPHS 2005, Budmerice, Slovakia
- 2005 Lincoln *Cheesecake Factory Problem*, AMS Regional Meeting, Lincoln, NE
- 2006 Boca Raton *Cheesecake Factory Design*, Thirty-seventh Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton, FL
- 2006 Ischia *Cheesecake Factory Problem*, Combinatorics 2006 (Italian International Conference)
- 2006 Prague *Decompositions of complete graphs into pompous cycles*, Sixth Czech-Slovak International Symposium on Combinatorics, Graph Theory, Algorithms and Applications

- 2006 Wichita *Orthogonal double covers of complete graphs by lobsters of diameter 5*, The 20th Midwest Conference on Combinatorics, Cryptography and Computing
- 2007 Boca Raton *Fair incomplete tournaments with odd number of teams*, Thirty-eighth Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton, FL
- 2007 Hradec nad Moravici *Decomposing complete graphs into small rosy graphs*, 42nd Czech-Slovak Conference on Graph Theory, Hradec nad Moravici, Czech Republic
- 2007 Bratislava *Rosy labelings and graph decompositions*, Design Theory of Alex Rosa—A Meeting in Celebration of the 70th Birthday of Alex Rosa, Bratislava, Slovakia
- 2007 Charleston *Bipartite Cheesecake Factory Problem*, The 21st Midwest Conference on Combinatorics, Cryptography and Computing
- 2007 Ballarat *Group products and graph decompositions*, workshop talk, Combinatorics, Graphs and Network Topology Group Seminar, University of Ballarat, Australia
- 2008 Pavlov *What is the diameter of graphs with constant neighborhood of two independent vertices?* workshop talk, International Graph Theory Workshop ZR60, Pavlov, Czech Republic
- 2008 Zadov *Decompositions of  $K_{n,n}$  into  $(0,j)$ -prisms*, 43rd Czech-Slovak Conference on Graph Theory, Zadov, Czech Republic
- 2008 Costermano *Decompositions of  $K_n$  and  $K_{n,n}$  into  $(0,j)$ -prisms*, Combinatorics 2008, Costermano, Italy
- 2009 Boca Raton *Cyclic decompositions of complete graphs into  $K_{k,m} + e$ : The missing case*, Fortieth Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton, FL
- 2009 Terchova *Cyclic decomposition of complete graphs into complete multipartite graphs with one added edge*, 44th Czech-Slovak Conference on Graph Theory, Terchova, Slovakia
- 2009 Rochester *Distance magic graphs and tournament scheduling*, The 23rd Midwest Conference on Combinatorics, Cryptography and Computing
- 2010 Boca Raton *Factorizations of complete graphs into double brooms*, Forty-first Southeastern International Conference on Combinatorics, Graph Theory, and Computing
- 2010 Corfu *Decompositions of complete bipartite graphs into generalized prisms*, Fourth Pythagorean Conference, (An Advanced Research Workshop in Geometry, Combinatorial Designs & Cryptology), Corfu, Greece
- 2010 Verbania *Rectangular negotiating table problem revisited*, Combinatorics 2010 (Italian International Conference)
- 2010 Normal *Graceful and rosy labelings of kayak paddles*, The 24th Midwest Conference on Combinatorics, Cryptography and Computing
- 2011 Boca Raton *Graceful and rosy labelings of kayak paddles*, Forty-second Southeastern International Conference on Combinatorics, Graph Theory, and Computing
- 2011 Sachticky *Distance magic labeling of hypercubes*, 46th Czech-Slovak Conference on Graph Theory, Sachticky, Slovakia
- 2012 Boca Raton *Decomposition of complete graphs into prisms*, Forty-third Southeastern International Conference on Combinatorics, Graph Theory, and Computing



- 2012 Terre Haute *Magic rectangle sets and ordered distance antimagic graphs*, MIGHTY LII
- 2012 Bandung *Decomposition of complete graphs into small prisms*, conference talk, 5th International Workshop on Optimal Network Topologies, Bandung, Indonesia
- 2012 Ames *Distance magic and Gamma-distance imagic graphs*, MIGHTY LIII, Iowa State University, Ames, IA
- 2012 Cedar City *Distance magic labelings of vertex transitive graphs*, The 26th Midwest Conference on Combinatorics, Cryptography and Computing
- 2012 Duluth *Benjamin Franklin and tournament scheduling*, MAA North Central Section Regional Meeting
- 2013 Kona *Magic rectangle sets and incomplete handicap tournaments*, Eighteenth Coast Combinatorics Conference 2013, Kona, Hawaii
- 2013 Boca Raton *Magic Rectangles and Handicap Tournaments*, Forty-Fourth Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton, FL
- 2013 Kosice *Group distance magic graphs*, Seventh Czech-Slovak International Symposium on Graph Theory, Combinatorics, Algorithms and Applications, Kosice, Slovakia
- 2013 Georgetown *Edge-swappable graphs*, The 27th Midwest Conference on Combinatorics, Cryptography and Computing, Southwestern University, Georgetown, Texas
- 2013 Kroczyce *Edge swappable trees and unicyclic graphs*, 22nd Kraków Workshop on Graph Theory "3 in 1"
- 2014 Boca Raton *Decompositions of complete bipartite graphs into generalized prisms*, Forty-Fifth Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton, FL
- 2014 Gaeta *Decompositions of complete bipartite graphs into cubic graphs*, Combinatorics 2014 (Italian International Conference), Gaeta, Italy
- 2014 Bratislava *Decompositions of complete bipartite graphs into prisms*, International Workshop on Network Topology, Bratislava, Slovakia
- 2014 Las Vegas *Incomplete Round-Robin Handicap Tournaments*, The 28th Midwest Conference on Combinatorics, Cryptography and Computing, University of Nevada Las Vegas
- 2015 Boca Raton *Incomplete handicap tournaments*, Forty-Sixth Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton, FL
- 2015 Houghton *Handicap incomplete tournaments of odd order*, Algebraic Combinatorics and Applications, Michigan Technological University, Houghton, MI
- 2015 Charleston *Handicap incomplete tournaments of odd order*, The 29th Midwest Conference on Combinatorics, Cryptography and Computing, College of Charleston, Charleston, SC
- 2016 Bratislava *Groups, cycles, and hypercubes*, Bratislava Three Kings Day Math and Physics Conference
- 2016 Boca Raton *Regular handicap tournaments of odd order*, Forty-Seventh Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton, FL
- 2016 Krakow *Handicap tournaments*, 9th International Workshop on Graph Labelings 2016, AGH-UST Krakow, Poland

2016	Normal	<i>Incomplete tournaments with handicap two</i> , The 30 <sup>th</sup> Midwest Conference on Combinatorics, Cryptography and Computing, Illinois State University, Normal, IL
2017	Boca Raton	<i>Products of cycles labeled by cyclic groups</i> , Forty-Eighth Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton, FL
2017	Carrollton	<i>Decomposition of <math>K_n</math> into unicyclic graphs with 8 edges</i> , The 31 <sup>st</sup> Midwest Conference on Combinatorics, Cryptography and Computing, University of West Georgia, Carrollton, GA
2017	Doslonce	<i>Decomposition of <math>K_n</math> into unicyclic graphs with 8 edges</i> , 26 <sup>th</sup> Kraków Workshop on Graph Theory “3 in 1”

### Colloquia Lectures:

1996	<i>Decompositions of transversal designs into isomorphic factors</i> , University of Mining and Metallurgy, Krakow
1997	<i>On two problems of graph theory</i> , University of Mining and Metallurgy, Krakow
2001	<i>Balanced schedules of round robin tournaments</i> , Indiana State University, Terre Haute
2001	<i>Balanced schedules of round robin tournaments</i> , Middlebury College
2001	<i>Balanced schedules of round robin tournaments</i> , University of Vermont, Burlington
2001	<i>Balanced schedules of round robin tournaments</i> , University of Minnesota Duluth, Duluth
2001	<i>Applications of Graph Theory in Sports Scheduling</i> , University of West Bohemia, Czech Republic
2003	<i>How to schedule a tournament</i> , undergraduate colloquium, UMD
2004	<i>League schedules, math, and corrupt referees</i> , undergraduate colloquium, Jagiellonian University, Krakow, Poland
2006	<i>Want to schedule an (un)fair tournament?</i> , undergraduate colloquium, UMD
2006	<i>Non-traditional round robin tournaments</i> , undergraduate colloquium, St Michael's College, Colchester, Vermont
2007	<i>Incomplete and non-compact round robin tournaments</i> , undergraduate colloquium, Technical University of Ostrava, Czech Republic
2007	<i>Incomplete and non-compact round robin tournaments</i> , undergraduate colloquium, Illinois State University
2007	<i>Want to schedule an (un)fair tournament?</i> graduate colloquium, Masaryk University, Brno, Czech Republic
2007	<i>Magic graphs and sports tournaments</i> , departmental colloquium, University of West Bohemia, Pilsen, Czech Republic
2007	<i>Graph theory and tournament scheduling</i> , departmental retreat talk, VSB-Technical University of Ostrava, Czech Republic

- 2012 *Scheduling a tournament*, Pi Day Lecture, Juniata College, Huntingdon, Pennsylvania
- 2012 *Benjamin Franklin, graph theory, and tournament scheduling*, department colloquium, Michigan Technological University, Houghton, Michigan
- 2013 *Rosa type labelings and decompositions of complete graphs*, department colloquium, Michigan Technological University, Houghton, Michigan
- 2017 *Scheduling a round-robin tournament*, Colloquium, Augsburg College, Minneapolis, MN

### Other Lectures:

- 1998 *Scheduling of round-robin tournaments with the use of graph theory*, Czech Football Association, Prague
- 2000 *How to schedule the XFL* — presentation for middle school students, Camel Hump Middle School
- 2000 *How to schedule the XFL* — presentation for high school students, Burlington High School
- 2000 *Balanced schedules of round robin tournaments*, University of Memphis, seminar talk
- 2001 *Mathematics in sports or How to schedule a tournament* — presentation for high school students, Canaan Middle and High School
- 2001 *Graph Theory: Research and Teaching*, University of West Bohemia, Czech Republic — presentation at the Meeting of the Scientific Board of the Faculty of Applied Sciences of UWB
- 2001 *New scheduling tables for Gambrinus Soccer League*— presentation at the Meeting of the Association of the League Clubs of the Czech Soccer Association
- 2001 *Applications of graph theory in sports scheduling*— presentation at the Meeting of the Scientific Board of the University of West Bohemia, Czech Republic
- 2002 *Decompositions of complete graphs into spanning trees*, seminar talk, Illinois State University, Normal, IL.
- 2004 *Coverings of  $K_{n,n} - M$  by bicliques and Sperner Theorem*, Polish Academy of Science Krakow
- 2006 *Decomposition of complete graph into pompous cycles*, combinatorics seminar talk, University of Vermont, Burlington
- 2007 *Decomposition of complete graph into spanning trees*, combinatorics seminar talk, AGH-University of Science and Technology, Krakow, Poland
- 2007 *The Cheesecake Factory problem*, research seminar talk, Illinois State University
- 2007 *Factorization of complete bipartite graphs*, graph theory seminar talk, Comenius University, Bratislava, Slovakia
- 2011 *Distance magic graphs*, combinatorics seminar talk, AGH-University of Science and Technology, Krakow, Poland
- 2012 *Distance magic graphs and tournament scheduling*, discrete mathematics seminar (DiMaS) talk, VSB-Technical University of Ostrava, Czech Republic
- 2012 *Handicap tournaments and distance antimagic graphs*, combinatorics seminar talk, AGH-University of Science and Technology, Krakow, Poland

- 2012 *Graph labelings: Two applications and one problem*, combinatorics seminar talk, University of Vermont, Burlington
- 2012 *Scheduling a tournament*, Math Club Guest Lecture, University of Wisconsin-Superior
- 2012 *Incomplete Round Robin Tournaments and Graph Theory*, Graduate Seminar Lecture, Brock University, Ontario, Canada
- 2012 *Distance magic and distance antimagic graphs*, Math Club Guest Lecture, University of Wisconsin-Superior
- 2013 *Magic rectangle sets and tournament scheduling*, combinatorics seminar talk, University of Vermont, Burlington
- 2013 *Incomplete round robin tournaments, graph labelings, and magic rectangle sets*, Advanced Optimization Laboratory Seminar, McMaster University, Canada
- 2014 *Decompositions of complete bipartite graphs into generalized prisms*, Combinatorics Seminar talk, University of Vermont, Burlington
- 2014 *Decompositions of complete bipartite graphs into prisms*, Discrete Mathematics Seminar talk, Technological University of Ostrava, Ostrava, Czech Republic
- 2014 *Decompositions of complete bipartite graphs into prisms*, Combinatorics Seminar talk, Michigan Technological University, Houghton, MI
- 2015 *Decompositions of complete bipartite graphs into generalized prisms*, combinatorics seminar talk, AGH-University of Science and Technology, Krakow, Poland
- 2015 *Graph theory tools in tournament scheduling*, Combinatorics, Algebra and Geometry Seminar talk, George Mason University, Fairfax, VA
- 2015 *How to schedule a professional soccer league*, undergraduate colloquium, Michigan Technological University, Houghton, MI
- 2016 *Group distance magic labelings of hypercubes and Cartesian products of cycles*, Discrete Mathematics Seminar talk, Technical University of Ostrava, Ostrava, Czech Republic
- 2016 *Even the Patriots can win Atlantic 10!*, Combinatorics, Algebra and Geometry Seminar talk, George Mason University, Fairfax, VA
- 2017 *Decompositions of complete bipartite graphs into generalized prisms revisited*, combinatorics seminar talk, AGH-University of Science and Technology, Krakow, Poland
- 2017 *Decompositions of complete bipartite graphs into generalized prisms revisited*, Discrete Mathematics Seminar talk, Technical University of Ostrava, Ostrava, Czech Republic
- 2017 *Decompositions of complete graphs and complete bipartite graphs into prisms and generalized prisms*, seminar talk, Illinois State University, Normal, IL
- 2017 *Distance magic and group distance magic graphs*, Combinatorics, Algebra and Geometry Seminar talk, George Mason University, Fairfax, VA
- 2017 *Decomposition of complete bipartite graphs into prisms revisited or I retract what I have retracted, and promise what I have promised*, graph theory seminar talk, University of Western Bohemia, Pilsen, Czechia
- 2017 *Noli turbare circulos meos! or Some cycle products are more magic than others*, Discrete Mathematics Seminar talk, Technical University of Ostrava, Ostrava, Czech Republic

2017 *Decomposition of complete bipartite graphs into prisms revisited or I retract what I have retracted, and promise what I have promised, graph theory seminar talk, Comenius University, Bratislava, Slovakia*

### External Grants Received:

1997	FRVŠ ČR	<i>Research stay of Professor Zdzislaw Skupień</i>
1998	GAČR	<i>Special graph, hypergraph and algorithmic structures</i>
1998	FRVŠ ČR	<i>Introduction of a block of courses on discrete mathematics</i>

### Internal Grants Received:

2002	Grant-in-Aid	<i>Isomorphic decompositions of complete graphs into spanning trees</i>	\$20,397
2002	Chancellor Small Grant	<i>Establishing collaboration in graph theory</i>	\$750
2003	Chancellor Small Grant	<i>Establishing collaboration in graph theory</i>	\$650
2003	Office of International Programs Grant	<i>Participation in conferences and collaboration in graph theory</i>	\$600
2005	Chancellor Small Grant	<i>Attending XXXVI SICCGTC</i>	\$750
2005	OEO Diversity Grant	<i>Research visit of Professor Italo Dejter</i>	\$800
2006	Office of International Programs Grant	<i>Continuing collaboration in graph theory</i>	\$500
2006	Chancellor Small Grant	<i>Attending XXXVIII Southeastern International Conference on Combinatorics, Graph Theory, and Computing</i>	\$750
2007	Chancellor Small Grant	<i>Supporting conference travel of Sylwia Cichacz, Visiting Fulbright Junior Scholar</i>	\$750
2008	Chancellor Small Grant	<i>Attending XXXIX Southeastern International Conference on Combinatorics, Graph Theory, and Computing</i>	\$750
2008	Office of International Programs Grant	<i>Continuing collaboration in graph theory</i>	\$1,300
2009	Chancellor Small Grant	<i>Attending XXXX Southeastern International Conference on Combinatorics, Graph Theory, and Computing</i>	\$750
2010	Chancellor Small Grant	<i>Attending XXXXI Southeastern International Conference on Combinatorics, Graph Theory, and Computing</i>	\$750
2010	Office of International Programs Grant	<i>Collaboration and presentations in graph theory</i>	\$2,000
2012	Chancellor Small Grant	<i>Attending XXXXIII Southeastern International Conference on Combinatorics, Graph Theory, and Computing</i>	\$1,000
2010	GPS Alliance	<i>International Travel Grant</i>	\$1,500
2014	GPS Alliance	<i>International Travel Grant</i>	\$1,500
2016	EVCAA	<i>Travel Grant</i>	\$1,500

**Editorial Boards:**

Opuscula Mathematica  
International Journal of Mathematics and Mathematical Sciences  
Gulf Journal of Mathematics  
The Open Mathematics Journal

**Conferences and workshops organized:**

- Chair, Organizing Committee of the Czech-Slovak Conference on Graph Theory, Soláň 1996
- Member, Organizing Committee of the Fifth Czech-Slovak Symposium on Combinatorics, Graph Theory, Algorithms and Applications, Prague 1998
- Chair, Organizing Committee of the Czech-Slovak Conference on Graph Theory, Rejvíz 2002
- Member, Organizing Committee of the Sixth Czech-Slovak Symposium on Combinatorics, Graph Theory, Algorithms and Applications, Prague 2006
- Chair, Organizing Committee of the Czech-Slovak Conference on Graph Theory, Hradec 2007
- Member, Organizing Committee of conference Design Theory of Alex Rosa, Bratislava, Slovakia 2007
- Chair, Organizing Committee of 20th International Workshop on Combinatorial Algorithms (IWOCOA), Hradec nad Moravici, Czech Republic 2009
- Chair, Organizing Committee of 20th International Workshop on Graph Labelings (IWOGL 2010), Duluth, 2010
- Member, Organizing Committee of MIGHTY L (50th Midwest Graph Theory Conference), Superior, WI, 2010
- Member, Steering Committee of the International Workshops on Graph Labelings (IWOGL)
- Co-organizer, AMS Sectional Meeting AMS Special Session on Graph Theory, UW Eau Claire, WI, 2014
- Chair, Organizing Committee, 25th International Workshop on Combinatorial Algorithms (IWOCOA), Duluth, 2014
- Co-organizer, AMS Sectional Meeting AMS Special Session on Graph Theory, Loyola University, Chicago, 2015
- Member, Organizing Committee of First MMMM Graduate Student Combinatorics Workshop, Houghton, MI, 2015
- Member, Organizing Committee of Second MMMM Graduate Student Combinatorics Workshop, Winnipeg, Canada, 2016
- Member, Organizing Committee of the 9<sup>th</sup> International Workshops on Graph Labelings (IWOGL), Krakow, Poland, 2016
- Co-chair, Organizing Committee of workshop Alex Rosa 80, Mikulov, Czechia, 2017
- Member, Organizing Committee of Third MMMM Graduate Student Combinatorics Workshop, UMD, 2017

**Program committees:**

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|--------|--|
| Member | Scientific Programme Committee of the First International Conference on Applied Mathematics and Informatics at Universities, Gabčíkovo, Slovakia, 2001 |
| Member | Scientific Programme Committee of the Second International Conference on Applied Mathematics and Informatics at Universities, Trnava, Slovakia, 2002   |
| Member | Programme Committee of The 1st Multidisciplinary International Conference on Scheduling: Theory and Applications, Nottingham, U.K., 2003               |
| Member | Programme Committee of The 2nd Multidisciplinary International Conference on Scheduling: Theory and Applications, New York, NY, 2005                   |
| Member | Programme Committee of the 2007 IEEE Symposium on Computational Intelligence and Scheduling (CISched 2007)   |
| Member | Programme Committee of The 3 <sup>rd</sup> Multidisciplinary International Conference on Scheduling: Theory and Applications, Paris, France, 2007      |

- Member      Program Committee of 19th International Workshop on Combinatorial Algorithms (IWOCA 2008), Nagoya, Japan, 2008
- Member      Program Committee of 20th International Workshop on Combinatorial Algorithms (IWOCA 2009), Hradec nad Moravici, Czech Republic 2009
- Member      Program Committee of International Conference on Mathematics and Computer Science ICMCS 2009, Chennai, India, 2009
- Member      Programme Committee of The 4<sup>th</sup> Multidisciplinary International Conference on Scheduling: Theory and Applications, Dublin, Ireland, 2009
- Member      Program Committee of 21th International Workshop on Combinatorial Algorithms (IWOCA 2010), London, England, 2010
- Member      Program Committee of 22nd International Workshop on Combinatorial Algorithms (IWOCA 2011), Victoria, Canada, 2011
- Member      Programme Committee of The 5<sup>th</sup> Multidisciplinary International Conference on Scheduling: Theory and Applications, Phoenix, Arizona, August 2011
- Member      Program Committee of 23rd International Workshop on Combinatorial Algorithms (IWOCA 2012), Tamil Nadu, India
- Member      Programme Committee of The 6<sup>th</sup> Multidisciplinary International Conference on Scheduling: Theory and Applications, Ghent, Belgium, August 2013
- Member      Program Committee of 24th International Workshop on Combinatorial Algorithms (IWOCA 2013), Rouen, France, 2013
- Member      Program Committee of 25th International Workshop on Combinatorial Algorithms (IWOCA 2014), Duluth, MN, 2014
- Member      Programme Committee of The 7<sup>th</sup> Multidisciplinary International Conference on Scheduling: Theory and Applications, Prague, Czech Republic, August 2015
- Member      Scientific Committee of International Conference on Mathematical Computer Engineering, VIT University, Chennai, India, December 2015
- Member      Program Committee of 28th International Workshop on Combinatorial Algorithms (IWOCA 2017), Newcastle, Australia
- Member      Scientific Committee of International Conference on Mathematical Computer Engineering, VIT University, Chennai, India, November 2017
- Member      Program Committee of 29th International Workshop on Combinatorial Algorithms (IWOCA 2018), Singapore

### **Refereeing:**

Grant Agency of the Czech Republic,  
 Acta Mathematica Sinica,  
 Advances and Applications in Discrete Mathematics,  
 Advances in Electrical and Electronic Engineering,  
 AKCE Journal of Graph Theory,  
 Applications and Applied Mathematics,  
 Ars Combinatoria,  
 Ars Mathematica Contemporanea,  
 Asian-European Journal of Mathematics,  
 Australasian Journal of Combinatorics,  
 British Journal of Mathematics & Computer Science  
 Bulletin of ICA,  
 Discrete Applied Mathematics,  
 Discrete Mathematics,





Member	External Review Board of the project “Institute of Theoretical Computer Science” for the Ministry of Education of the Government of the Czech Republic, 2002
Member	External Review Board of the project “Kontakt—Faculty of Mathematics and Physics, Charles University” for the Ministry of Education of the Government of the Czech Republic, 2002
Member	External Review Board of the project “Institute of Theoretical Computer Science” for the Ministry of Education of the Government of the Czech Republic, 2003
Co-founder and coordinator	<i>GRATKO</i> — Lake Superior Research Seminar on Graph Theory, Algebra, and Combinatorics, in collaboration with Department of Mathematics and Computer Science, University of Wisconsin Superior
Founder and coordinator	<i>MOSSAD</i> — ( <i>Monday Seminar for Students and Dalibor</i> ) a research graph theory seminar for graduate and undergraduate students
Member	External Review Board of the project “Graph structures, graph operators, and computational complexity” in the program KONTAKT by the Ministry of Education of the Czech Republic, 2006
Research Director	Combinatorica o.p.s. Czech Republic (N.P.O.)
External Evaluator	P&T Committee, Illinois State University, 2008
Member	Joint Advisory Board for the Ph.D. Programs in Mathematics at University of Western Bohemia and J.E. Purkyne University, Czech Republic
External Examiner	PhD thesis, Kalasalingam University, India, 2011
External Examiner	PhD thesis, Vinayaka University, India, 2011
Referee	NSERC Discovery Grants Review panel (Canada), 2011
External Evaluator	P&T Committee, Stonehill College, 2011
External Evaluator	P&T Committee, Kuwait University, 2011
Member	State Examining Committee for the Ph.D. Programs in Theoretical Computer Science at Charles University, Czech Republic
External Examiner	PhD thesis, Bharathiar University, India, 2012
External Examiner	PhD thesis, Technical University Ostrava, Czech Republic, 2012
External Examiner	PhD thesis (2x), Anna University, India, 2012
External Evaluator	P&T Committee, Yarmouk University, 2012
External Examiner	PhD thesis, Kuwait University, Kuwait, 2013
External Evaluator	P&T Committee, Kutztown University, 2013
Executive Member	Executive Member of the Forum of Researchers on Mathematics in Engineering & Business (FRMEB), India
Member	State Examining Committee for the Ph.D. Programs in Applied Mathematics, University of West Bohemia, Czech Republic
External Examiner	PhD thesis, McMaster University, Canada, Department of Computing and Software, 2013
Member	Graduate Faculty, Michigan Technological University, 2013–current
External Examiner	PhD thesis, Bharathiar University, India, 2014

Editor	Proceedings of 25th International Workshop on Combinatorial Algorithms (IWOCA 2014), Duluth, MN, 2014
External Examiner	PhD thesis, Alagappa University, India, 2015
External Examiner	PhD thesis, Periyar University, India, 2015
External Examiner	PhD thesis, Noorul Islam University, India, 2015
Grant Proposal Reviewer	NSA Mathematical Sciences Grant Program, 2015
Grant Proposal Reviewer	VEGA Grant Agency, Slovakia, 2015
Referee	NSERC Discovery Grants Review panel (Canada), 2016
External Evaluator	Promotion to Full Professor Committee, University of Malaysia, 2016
External Evaluator	P&T Committee, Stonehill College, 2016
Vice-president	Institute of Combinatorics and its Applications, 2016–current
Guest Editor	Special Volume of Electronic Notes in Discrete Mathematics dedicated to the 9 <sup>th</sup> International Workshops on Graph Labelings (IWOGL), Krakow, Poland, 2016
Open Problems Co-Chair	28 <sup>th</sup> International Workshop on Combinatorial Algorithms, Newcastle, Australia, 2016–2017
External Examiner	PhD thesis, McMaster University, Canada, Department of Computing and Software, 2017
Program Committee Member	International Conference on Discrete Mathematics, Periyar University, Salem, India

### **Memberships in Professional Organizations:**

Institute of Combinatorics and its Applications (Fellow 2000–current, Vice President 2016–current)

Czech Mathematical Society (Member 1978–current)

### **Service (UMD):**

2002–2003	Undergraduate Degree Program Committee (UMD Math & Stat Department)
2003–2008	Graduate Degree Program Committee (UMD Math & Stat Department)
2003–2004	Outreach Committee — Transportation Studies (UMD Math & Stat Department)
2006–current	International Education Committee (UMD Math & Stat Department)
2007–2010	International Education Subcommittee of EPC (UMD)
2008	Review Panel for Single Semester Leaves (SCSE)
2009–current	Director of Graduate Studies (UMD Math & Stat Department)
2009–current	Graduate Council (UMD)
2010	Graduate School ad-hoc Committee on Recruiting and New Web Design (UMD)
2011–2013	Executive Committee of Campus Assembly (UMD)
2013–2015	Chair of Graduate Council (UMD)
2013–2015	Member of Faculty Council, ex-officio (UMD)
2013–2014	Member of Teaching and Learning Committee, ex-officio (UMD)

**Service (external):**

2016–current Vice President of The Institute of Combinatorics and its Applications

**Consulting:**

1994–95 *Data International Inc.*  
1995 *Unicont Opava Ltd.*  
1995 *Adverta Prague Inc.*  
1997 *Czech Soccer Association*  
1998 *UEFA (Union Des Associations Européennes De Football)*  
1999–2000 *Czech Basketball Federation (Schedule)*  
2002 *Czech Hockey Association (Schedules)*  
2000 *World Wrestling Federation Entertainment, Inc. (Schedule)*  
2000 *XFL, Llc. (Schedule)*  
2002 *NSIC (Schedules for Football and Soccer Competitions)*  
2002–Current *Czech Soccer Association (Schedules)*  
2005 *NCC (Football Schedules 2006–2008)*  
2006 *Mid-America Intercollegiate Athletics Association (Football Schedule)*  
2007–2009 *Polish Soccer Association (Schedules)*  
2008 *City of Superior Police Department (shift schedules)*  
2012 *NSIC (Schedule for Volleyball Competition)*  
2013 *NSIC (Schedule for Basketball Competition)*