CV- Boštjan Brešar (July 2017)

Personal data

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Affilliation

 University of Maribor, Faculty of Natural Sciences and Mathematics, Slovenia

• Institute of Mathematics, Physics and Mechanics, Ljubljana, Slovenia

Education

- BS in Applied Mathematics, University of Ljubljana, 1994
- MS in Computer Science, University of Maribor, 1998
- Ph.D. in Mathematics, University of Maribor, 2000

Positions

1996 - 2001: assistant for mathematics (University of Maribor)

2001-2006: assistant professor for mathematics (University of Maribor)

2006 - 2011: associate professor for mathematics (University of Maribor)

2011 - present: full professor for mathematics (University of Maribor)

Professional duties

2011-present: member of the Senate at Faculty of Natural Sciences and Mathematics, University of Maribor

2012-2016: deputy dean for research and graduate studies (Faculty of Natural Sciences and Mathematics, University of Maribor)

2016- present: deputy dean for research and international affairs (Faculty of Natural Sciences and Mathematics, University of Maribor)

memberships in committees at University of Maribor: Scientific research committee (since 2012), Graduate studies committee (since 2012), Statute committee (2015-2017), International and inter-university cooperation (since 2016)

Research statement: various branches of graph theory and combinatorics, with emphasis on metric graph theory, graph products, graph classes, graph invariants (domination, packing, coloring), games on graphs, partially ordered sets, and algorithmic issues.

Scientific publications: Over 90 scientific papers published in international journals, most of which in JCR.

Book chapter

B. Brešar, M. Kovše, A. Tepeh, Geodetic sets in graphs, in: M. Dehmer ed., Structural Analysis of Complex Networks, Birkhäuser, Boston (2010), 197-218.

PhD students

Former:

- Aleksandra Tepeh (Horvat), 2009
- Tadeja Kraner Šumenjak, 2009
- (Karl Benkič, co-supervised, 2010)
- Tanja Gologranc, 2013

Current:

- Tim Kos
- Goran Radić
- Jasmina Ferme

Editorial work:

- Section Editor for *Discrete Mathematics and Theoretical Computer Science*, since 2015
- Guest Editor for the special issue "Algorithmic and Structural Graph Theory" in *Discrete Applied Mathematics; Call for papers*

Conference scientific committees:

- Indo-Slovenia Conference on Graph Theory and Applications (Indo-Slov-2013), Trivandrum, 2013
- Conference on Algorithms and Discrete Applied Mathematics (CALDAM 2015), Kanpur, 2015
- Algoritmic Graph Theory on the Adriatic coast (AGTAC 2015), Koper, 2015
- Conference on Algorithms and Discrete Applied Mathematics (CALDAM 2016), Trivandrum, 2016

Organizing committees of conferences:

- 5th Slovenian International Conference on graph Theory, Bled, June, 2003
- 28th Ljubljana Leoben Graph Theory Seminar, Koper, Sept., 2014
- 8th Slovenian Conference on graph Theory, Kranjska Gora June, 2015

Leader of the "Seminar in discrete mathematics in Maribor (jointly with Sandi Klavžar), since 2008.

Referee

Serving regularly as a referee (over 20 journals in mathematics). Serving as the reviewer for Mathematical Reviews (MathSciNet).

Research projects led

ARRS, Slovenia: Z1-3073 Structural and algebraic properties of graph classes; 2001-2004

ARRS, Slovenia: J1-2043 Graphs and related mathematical structures; 2009-2012

Bilateral projects led

- University P.J.Safarik (Kosice, Slovakia) 2008-2009 and 2010-2011
- Université de la Mediterranée (Marseille, France); 2010-2011
- University of Buenos Aires, (BA, Argentina); 2012-2014

Invited talks at conferences

- Algebraic Graph Theory 2009, invited talk at 'Gert Sabidussi is 80', Dubrovnik, Croatia, June 2009
- International Conference on Recent Trends in Graph Theory and Combinatorics, invited talk at minisymposium, Cochin, India, August 2010.
- 7th Slovenian International Conference on Graph Theory, invited speaker and organizer of a minisymposium, Bled, Slovenia, June 2011
- Quinto Seminario de la Red Latinoamericana Optimización Discreta y Grafos: Algoritmos y Aplicaciones, invited talk, Universidad Nacional de General Sarmiento, Buenos Aires, Argentina, November 2012
- Indo-Slovenia Conference on Graph Theory and Applications, invited speaker, Trivandrum, Indian, February 2013
- CSASC 2013 Joint Mathematical conference, invited talk at a minisymposium, Koper, Slovenia, June 2013
- 23rd Workshop on Cycles and Colourings, invited plenary speaker, High Tatras, Slovakia, September 2013

Invited talks at institutions: University of Leoben (2000, 2004), Hereditarnia Club, University of Zielona Gora (2004) University of Košice (2006, 2009), Clemson University (2008), University of Vienna (2012)

Invited talk at the event "Odlični v znanosti 2013" ("Excellent in Science 2013") organized by the Slovenian Research Agency (ARRS), Ljubljana, december 2014.

Selected publications:

- **1.** BREŠAR, Boštjan. On the natural imprint function of a graph. *European journal of combinatorics*, ISSN 0195-6698, 2002, vol. 23, no. 2, 149-161.
- **2.** BREŠAR, Boštjan. Intersection graphs of maximal hypercubes. *European journal of combinatorics*, ISSN 0195-6698, 2003, vol. 24, no. 2, 195-209.
- **3.** BREŠAR, Boštjan. Vizing-like conjecture for the upper domination of Cartesian products of graphs the proof. *The Electronic journal of combinatorics*, ISSN 1077-8926. [Online ed.], 2005, vol. 12(1), n 12 (6 p.).
- **4.** BREŠAR, Boštjan, KLAVŽAR, Sandi, RALL, Douglas F. On the packing chromatic number of Cartesian products, hexagonal lattice, and trees. *Discrete applied mathematics*, ISSN 0166-218X. [Print ed.], 2007, vol. 155, iss. 17, 2003-2311.
- **5.** BREŠAR, Boštjan, HENNING, Michael A., RALL, Douglas F. Rainbow domination in graphs. *Taiwanese journal of mathematics*, ISSN 1027-5487, 2008, vol. 12, no. 1, p.213-225. **6.** BREŠAR, Boštjan, RALL, Douglas F. Fair reception and Vizing's conjecture. *Journal of graph*
- **6.** BRESAR, Bostjan, RALL, Douglas F. Fair reception and Vizing's conjecture. *Journal of graph theory*, ISSN 0364-9024, 2009, vol. 61, no. 1, 45-54.
- **7.** BREŠAR, Boštjan, KLAVŽAR, Sandi, RALL, Douglas F. Domination game and an imagination strategy. *SIAM journal on discrete mathematics*, ISSN 0895-4801, 2010, vol. 24, no. 3, 979-991.
- **8.** BOKAL, Drago, BREŠAR, Boštjan, JEREBIC, Janja. A generalization of Hungarian method and Hall's theorem with applications in wireless sensor networks. *Discrete applied mathematics*, ISSN 0166-218X. [Print ed.], 2012, vol. 160, iss. 4-5, 460-470.
- **9.** BREŠAR, Boštjan, CHALOPIN, Jérémie, CHEPOI, Victor, GOLOGRANC, Tanja, OSAJDA, Damian. Bucolic complexes. *Advances in mathematics*, ISSN 0001-8708, 2013, vol. 243, 127-167. **10.** BREŠAR, Boštjan. Vizing's conjecture for graphs with domination number 3 a new proof. *The Electronic journal of combinatorics*, ISSN 1077-8926. [Online ed.], 2015, vol. 22, iss. 3, p3.38 (8 str.).