

Curriculum Vitae

Full name Zoran Stanić
Address University of Belgrade, Faculty of Mathematics
Studentski trg 16, P. P. 550
11000 Belgrade, Serbia
E - mail zstanic@math.rs; zstanic@matf.bg.ac.rs
Date of birth July 1, 1975.
Place of birth Ivanjica, Serbia
Citizenship Serbia

Education:

1982 - 1990 Elementary school, Ivanjica
1990 - 1994 Gimnasium, Ivanjica
1995 - 2000 Basic study, University of Belgrade, Faculty of Mathematics
2000 - 2004 M.Sc. study, University of Belgrade, Faculty of Mathematics
2004 - 2007 Ph.D. study, University of Belgrade, Faculty of Mathematics

Degrees and Diplomas:

2000 B.Sc., University of Belgrade, Faculty of Mathematics
2004 M.Sc., University of Belgrade, Faculty of Mathematics. M.Sc. Thesis:
Geodesic Nets
2007 Ph.D., University of Belgrade, Faculty of Mathematics. Ph.D. Thesis:
Some reconstructions in spectral graph theory and graphs with integral Q -spectrum

Employments:

2000 - 2004 Junior Teaching Assistant, University of Belgrade, Faculty of Mathematics
2004 - 2008 Senior Teaching Assistant, University of Belgrade, Faculty of Mathematics
2008 - Assistant Professor, University of Belgrade, Faculty of Mathematics

Teaching Activities:

1. Numerical Analysis 2
2. Descriptive Geometry
3. Analytical Geometry (Faculty of Physics, University of Belgrade)
4. Analytical Geometry
5. Equations of Mathematical Physics
6. Introduction to Numerical Mathematics
7. Geometrical Algorithms (Faculty of Computer Sciences, Union University, Belgrade)
8. Numerical Methods of Optimization
9. Introduction to Computer Organization
10. Mathematical Programming
11. Combinatorial Optimization (M.Sc. studies)
12. Combinatorial Graph Theory with applications (Ph.D. studies)
13. The algorithms on Graphs and their Applications (Ph.D. studies)
14. Spectral Graph Theory and Applications (Ph.D. studies)

Other Professional Activities:

- Scientific Projects:

1. Investigator on Project 1646: Geometry, education and visualization with applications (2002 - 2005).
2. Investigator on DAAD Project: Multimedia Technology for Mathematics and Computer Science Education (2003 - 2007).
3. Investigator on Project 144032D: Geometry, education and visualization with applications (2006 - 2010).
4. Investigator on Project 174012: Geometry, education and visualization with applications (2011 -).
5. Investigator on Project 174033: Graph Theory and Mathematical Programming with Applications to Chemistry and Computer Sciences (2011-).

- Member of Zentralblatt MATH Reviews editorial staff since 2008.

- Member of Mathematical Reviews editorial staff since 2010.

- Member of editorial board of journal *Applied and Computational Mathematics* (Science Publishing Group, 548 Fashion Avenue, New York, NY 10018, USA), <http://www.sciencepublishinggroup.com/journal/editorialboard.aspx?journalid=147> .

Scientific papers:

1. Z. Stanić: *A game based on spectral graph theory*, Univ. Beograd Publ. Elektrotehn. Fak., Ser Mat., **16** (2005), 88-93.
2. Z. Stanić: *Geodesic polyhedra and nets*, Kragujevac, J. Math., **28** (2005), 41-55.

3. Z. Stanić: *Determination of large families and diameter of equiseparable trees*, Publ. Inst. Math. (Beograd), **79(93)** (2006), 29-36.
4. Z. Stanić, S.K. Simić: *On graphs with unicyclic star complement for 1 as the second largest eigenvalue*, In: Proceedings of the Conference Contemporary Geometry and Related Topics (N. Bokan, M. Djorić, Z. Rakić, B. Wegner, J. Wess, eds.), June 26 – July 02, 2005, Belgrade (Serbia and Montenegro), Matematički fakultet, Beograd, pp. 475-484, 2006.
5. S.K. Simić, Z. Stanić: *The polynomial reconstruction of unicyclic graphs is unique*, Linear Multilinear Algebra, **55** (2007), 35-43.
6. Z. Stanić: *On graphs whose second largest eigenvalue equals 1 – the star complement technique*, Lin. Algebra Appl., **420** (2007), 700-710.
7. Z. Stanić: *There are exactly 172 connected Q -integral graphs up to 10 vertices*, Novi Sad J. Math., **37(2)** (2007), 193-205.
8. S.K. Simić, Z. Stanić: *On the polynomial reconstruction of graphs whose vertex-deleted subgraphs have spectra bounded from below by -2*, Lin. Algebra Appl., **428** (2008), 1865-1873.
9. S.K. Simić, Z. Stanić: *Q -integral graphs with edge-degrees at most five*, Discrete Math., **308** (2008), 4625-4634.
10. Z. Stanić: *Some star complements for the second largest eigenvalue of a graph*, Ars Math. Contemp., **1** (2008), 126-136.
11. Z. Stanić: *Some results on Q -integral graphs*, Ars Combin., **90** (2009), 321-335.
12. Z. Stanić: *On nested split graphs whose second largest eigenvalue is less than 1*, Linear Algebra Appl., **430** (2009), 2200-2211.
13. S.K. Simić, Z. Stanić: *On some forests determined by their Laplacian or signless Laplacian spectrum*, Comp. Math. Appl., **58** (2009), 171-178.
14. Z. Stanić: *On determination of caterpillars with four terminal vertices by their Laplacian spectrum*, Linear Algebra Appl. **431** (2009), 2035-2048.
15. S.K. Simić, Z. Stanić: *On Q -integral $(3,s)$ -semiregular bipartite graphs*, Appl. Anal. Discrete Math., **4** (2010), 167-174.
16. D. Cvetković, S.K. Simić, Z. Stanić: *Spectral determination of graphs whose components are paths and cycles*, Comp. Math. Appl., **59** (2010), 3849-3857.
17. Z. Stanić: *Some notes on minimal self-centered graphs*, AKCE Int. J. Graphs Combin., **7** (2010), 97-102.
18. Z. Stanić: *On regular graphs and coronas whose second largest eigenvalue does not exceed 1*, Linear Multilinear Algebra, **58** (2010), 545-554.
19. T. Bıykođlu, S.K. Simić, Z. Stanić: *Some notes on spectra of cographs*, Ars Combin., **100** (2011), 421-434.
20. D. Cvetković, P. Rowlinson, Z. Stanić, M.-G. Yoon: *Controllable graphs*, Bull. Cl. Sci. Math. Nat. Sci. Math., **36** (2011), 81-88.
21. D. Cvetković, P. Rowlinson, Z. Stanić, M.-G. Yoon: *Controllable graphs with least eigenvalue at least -2*, Appl. Anal. Discrete Math., **5** (2011), 165-175.
22. I. Jovanović, Z. Stanić: *Spectral distances of graphs*, Linear Algebra Appl., **436** (2012), 1425-1435.
23. Z. Stanić: *Some graphs whose second largest eigenvalue does not exceed $\sqrt{2}$* , Linear Algebra Appl., **437** (2012), 1812-1820.
24. M. Anđelić, T. Koledin, Z. Stanić: *Nested graphs with bounded second largest (signless Laplacian) eigenvalue*, Electron. J. Linear Algebra, **24** (2012), 181-201.
25. M. Milatović, Z. Stanić: *The nested split graphs whose second largest eigenvalue is equal to 1*, Novi Sad J. Math., **42(2)** (2012), 33-42.
26. M. Anđelić, C.M. da Fonseca, T. Koledin, Z. Stanić: *Sharp spectral inequalities for connected bipartite graphs with maximal Q -index*, Ars Math. Contemp., **6** (2013), 171-185.

27. T. Koledin, Z. Stanić: *Regular bipartite graphs with three distinct non-negative eigenvalues*, Linear Algebra Appl., **438** (2013), 3336-3349.
28. T. Koledin, Z. Stanić: *Regular graphs whose second largest eigenvalue is at most 1*, Novi Sad J. Math., **43(3)** (2013), 145-153.
29. Z. Stanić: *Graphs with small spectral gap*, Electron. J. Linear Algebra, **26** (2013), 417-432.
30. T. Koledin, Z. Stanić: *Regular graphs with small second largest eigenvalue*, Appl. Anal. Discrete Math. (to appear) DOI: 10.2298/AADM130710013K.

Conferences attended:

1. Workshop Vive Math (Visualization and Verbalization of Mathematics and Interdisciplinary Aspects), December 14 - 15, 2001. Niš (Yugoslavia). Lecture: *About Applying Program Package AutoCAD in Descriptive Geometry*.
2. Workshop Contemporary Geometry and Related Topics, May 15 - 21, 2002, Belgrade (Yugoslavia).
3. 13th Yugoslav Geometrical Seminar, October 10 - 12, 2002, Kragujevac (Yugoslavia). Lecture: *Discrete Geodesics*.
4. 14th Yugoslav Geometrical Seminar, October 3 - 5, 2003, Zrenjanin (Yugoslavia). Lecture: *G—Polyhedra and Geodesic Surface Discretization*.
5. International Conference Mathematics in 2004 at Kragujevac, June 17 - 19, 2004, Kragujevac (Serbia and Montenegro). Lecture: *Geodesic Nets*.
6. 3rd Summer School in Modern Mathematical Physics, August 20 - 30, 2004, Zlatibor (Serbia and Montenegro).
7. Workshop Multimedia Technology for Mathematics and Computer Science Education, September 22 - 25, 2004, Belgrade (Serbia and Montenegro). Lecture: *A New Class of Discrete Surfaces*.
8. Conference Contemporary Geometry and Related Topics, June 26 - July 02, 2005, Belgrade (Serbia and Montenegro). Lecture: *On Reconstruction of the Graph Polynomial*.
9. Workshop Multimedia Technology for Mathematics and Computer Science Education, November 10 - 12, 2005, Belgrade (Serbia and Montenegro).
10. Spring School Geometry and Visualization, April 10 - 13 2006, Berlin (Germany).
11. Workshop Multimedia Technology for Mathematics and Computer Science Education, September 21 - 24, 2006, Belgrade (Serbia).
12. 6th Slovenian International Conference on Graph Theory, June 24 - 30, 2007, Bled (Slovenia). Lecture: *Q - Integral Graphs with Edge - Degree at Most Five*.
13. Workshop Geometry and Visualization (an annual meeting of the project Multimedia Technology for Mathematics and Computer Science Education), September 20 - 22, 2007, Belgrade (Serbia).
14. Gene Around The World Conference, February 29 - March 1, 2008, Tripolis, Arcadia (Greece), Poster: *On Q-integral graphs*.
15. Spring School Geometry and Visualization, April 19 - 25, 2008, Belgrade, (Serbia).

Conferences organized:

1. Workshop Contemporary Geometry and Related Topics, May 15 - 21, 2002, Belgrade (Yugoslavia).
2. Workshop Multimedia Technology for Mathematics and Computer Science Education, September 22 - 25, 2004, Belgrade (Serbia and Montenegro).

3. Conference Contemporary Geometry and Related Topics, June 26 – July 02, 2005, Belgrade (Serbia and Montenegro).
4. Workshop Multimedia Technology for Mathematics and Computer Science Education, November 10 - 12, 2005, Belgrade (Serbia and Montenegro).
5. Workshop Multimedia Technology for Mathematics and Computer Science Education, 21 - 24, 2006, Belgrade (Serbia).
6. Workshop Geometry and Visualization (an annual meeting of the project Multimedia Technology for Mathematics and Computer Science Education), September 20 - 22, 2007, Belgrade (Serbia).

Publications:

1. Z. Stanić, S. Vukmirović: *Problems in Projective Geometry with Applications in Computer Graphics* (in Serbian), Faculty of Mathematics, Belgrade, 2003.

Software:

1. Z. Stanić, N. Stefanović: ***SCL - star complement library***. The library of programs written in C++; it can be used in spectral graph theory for the reconstruction of graphs by so-called star complement technique. The modules for computing the maximal cliques and for computing the isomorphism classes of graphs are included. Using *SCL* several published results are obtained.
Versions: v. 1.0 (2005), v. 2.0, v. 2.1 (2007).
URL: <http://www.math.rs/~zstanic/scl.htm>
(<http://dmoz.org/Science/Math/Combinatorics/Software/>).