
Dr Ivan Živić, full professor
– CURRICULUM VITAE –

Personal Data

Full name: Ivan Živić

Date of birth: 01.05.1963.

Place of birth: Rača, Serbia

Education

PhD in Physics: Faculty of Physics, University of Belgrade, 1991–1994.

MSc in Physics: Faculty of Physics, University of Belgrade, 1987–1991.

BSc in Physics: Faculty of Science, University of Kragujevac, 1983–1987. (the best student in generation)

High School: “Prva kragujevačka gimnazija”, Kragujevac, 1980–1982. (the certificate of excellence Vuk Karadžić); “Drugi šumadijski odred”, Rača, 1978–1980.

Primary School: “Karadjordje”, Rača, 1970–1978. (the certificate of excellence Vuk Karadžić)

Professional Experience

2007–present: Full Professor, Faculty of Science, University of Kragujevac

1999–2007: Associate Professor, Faculty of Science, University of Kragujevac

1994–1999: Assistant Professor, Faculty of Science, University of Kragujevac

1992–1994: Assistant, Faculty of Science, University of Kragujevac

1989–1992: Aspirant Assistant, Faculty of Science, University of Kragujevac

Professional Positions

2010–2011: Head of Department of Physics, Faculty of Science, University of Kragujevac

2002–2006: Member of Commission for Physics, Serbian Ministry of Science

2001–2002: Vice-Dean for Finance, Faculty of Science, University of Kragujevac

2001–2001: Head of Department of Physics, Faculty of Science, University of Kragujevac

Teaching Experience

Undergraduate level: Theoretical Mechanics, Statistical Physics

PhD level: Theory of Phase Transitions

Previously: Physical Mechanics, Classical Theoretical Physics, Computational Mathematics, Advanced Statistical Physics

Publications

Articles in International Journals

Journal	number
Physical Review E	8
Journal of Physics A: Mathematical and Theoretical (General)	8
Journal of Statistical Mechanics: Theory and Experiment	6
Physica A: Statistical Mechanics and Its Applications	6
Chaos, Solitons & Fractals	3
Journal of Statistical Physics	1
European Physical Journal B. Condensed Matter and Complex Systems	1

1. S.Milošević and **I.Živić**, “Self-avoiding walks on fractals studied by the Monte Carlo renormalization group”, *J. Phys. A* **24** (1991) L833-L838.
2. S.Milošević and **I.Živić**, “Exact analysis of the self-avoiding random walks on two infinite families of fractals”, *Physica A* **186** (1992) 329-345.
3. **I.Živić**, S.Milošević, and H.E.Stanley, “Self-avoiding walks on compact fractals: Exact and Monte Carlo renormalization group results”, *Phys. Rev. E* **47** (1993) 2430-2439.
4. **I.Živić** and S.Milošević, “Critical exponent γ for self-avoiding walks on the Sierpinski gasket family of fractals”, *J. Phys. A* **26** (1993) 3393-3397.
5. S.Milošević and **I.Živić**, “Universal crossing of the self-avoiding walk critical exponent ν at the Euclidean value $3/4$ for several different fractal families”, *J. Phys. A* **26** (1993) 7263-7272.
6. **I.Živić**, S.Milošević, and H.E.Stanley, “Test of the bounds on the crossover exponent for polymer adsorption on fractals”, *Phys. Rev. E* **49** (1994) 636-640.
7. S.Milošević and **I.Živić**, “Asymptotic behaviour of the number of self-avoiding walks on finitely ramified fractals”, *J. Phys. A* **27** (1994) 7739-7751.
8. V.Miljković, S.Milošević, and **I.Živić**, “Continuously varying crossover exponent for adsorption of linear polymers on fractals”, *Phys. Rev. E* **52** (1995) 6314-6320.
9. S.Elezović–Hadžić, M.Knežević, S.Milošević, and **I.Živić**, “Critical exponents for numbers of differently anchored polymer chains on fractal lattices with adsorbing boundaries”, *J. Stat. Phys.* **83** (1996) 1241-1253.
10. S.Milošević, **I.Živić** and V.Miljković, “Adsorption of linear polymers on impenetrable fractal boundaries of checkerboard fractal lattices”, *Phys. Rev. E* **55** (1997) 5671-5679.
11. **I.Živić** and S.Milošević, “Monte Carlo renormalization group study of crosslinked polymer chains on fractals”, *J. Phys. A* **31** (1998) 1365-1372.
12. **I.Živić**, S.Milošević, and H.E.Stanley, “Comparative study of self-avoiding trails and self-avoiding walks on a family of compact fractals”, *Phys. Rev. E* **58** (1998) 5376-5381.
13. S.Milošević, **I.Živić**, and S.Elezović–Hadžić, “Comment on Critical behavior of the chain-generating function of self-avoiding walks on the Sierpinski gasket family: The Euclidean limit”, *Phys. Rev. E* **61** (2000) 2141-2144.

14. V.Miljković, S.Milošević, R.Skepnek and **I.Živić**, “Pattern recognition in damaged neural networks”, *Physica A* **295** (2001) 526-536.
15. S.Elezović–Hadžić, **I.Živić** and S.Milošević, “Exact and Monte Carlo study of adsorption of a self-interacting polymer chain for a family of tree-dimensional fractals”, *J. Phys. A* **36** (2003) 1213-1237.
16. V.Miljković, **I.Živić** and S.Milošević, “On the number of contacts of two polymer chains situated on fractal structures”, *Eur. Phys. J. B* **40** (2004) 55-61.
17. **I.Živić**, S.Milošević and B.Djordjević, “On the total number of distinct self-interacting self-avoiding walks on tree-dimensional fractal structures”, *J. Phys. A* **38** (2005) 555-565.
18. **I.Živić**, V.Miljković and S.Milošević, “Statistics of the two self-avoiding random walks on the tree-dimensional fractal lattices”, *Chaos, Solitons & Fractals* **33** (2007) 1157-1167.
19. **I.Živić**, “On the number of contacts of a floating polymer chain cross-linked with a surface adsorbed chain on fractal structures”, *J. Stat. Mech.* (2007) P02005 (14 pages).
20. **I.Živić**, S.Elezović–Hadžić and S.Milošević, “Critical behavior of interacting two-polymer system in a fractal solvent: an exact renormalization group approach”, *J. Stat. Mech.* (2008) P04022 (21 pages).
21. **I.Živić**, S.Elezović–Hadžić and S.Milošević, “Critical behavior of the system of two crossing self-avoiding walks on a family of three-dimensional fractal lattices”, *Chaos, Solitons & Fractals* **42** (2009) 74-83.
22. **I.Živić**, S.Elezović–Hadžić and S.Milošević, “Stiffness dependence of critical exponents of semiflexible polymer chains situated on two-dimensional compact fractals”, *Phys. Rev. E* **80** (2009) 061131 (9 pages).
23. **I.Živić**, S.Elezović–Hadžić and S.Milošević, “Statistics of semiflexible self-avoiding trails on a family of two-dimensional compact fractals”, *J. Stat. Mech.* (2011) P10015 (16 pages).
24. S.Elezović–Hadžić and **I.Živić** “Pulling self-interacting linear polymers on a family of fractal lattices embedded in three-dimensional space”, *J. Stat. Mech.* (2013) P02045 (28 pages).
25. **I.Živić**, S.Elezović–Hadžić and S.Milošević, “Statistical mechanics of polymer chains grafted to adsorbing boundaries of fractal lattices embedded in three-dimensional space”, *Physica A* **413** (2014) 307-319.
26. **I.Živić**, S.Elezović–Hadžić and S.Milošević, “Semiflexible crossing-avoiding trails on plane-filling fractals”, *Chaos, Solitons & Fractals* **81** (2015) 320-329.
27. **I.Živić**, S.Elezović–Hadžić and S.Milošević, “Self-interacting polymer chains terminally anchored to adsorbing surfaces of three-dimensional fractal lattices”, *Physica A* **490** (2018) 732-744.
28. **I.Živić**, S.Elezović–Hadžić and S.Milošević, “Semiflexible polymer chains on the square lattice: Numerical study of critical exponents”, *Phys. Rev. E* **98** (2018) 062133 (11 pages).
29. D.Marčetić, S.Elezović–Hadžić, N.Adžić and **I.Živić**, “Semi-flexible compact polymers in two dimensional nonhomogeneous confinement”, *J. Phys. A* **52** (2019) 125001

- (23 pages).
30. D.Marčetić, S.Elezović–Hadžić and **I.Živić**, “Statistics of close-packed dimers on fractal lattices”, *Physica A* **554** (2020) 124275 (11 pages).
 31. **I.Živić**, S.Elezović–Hadžić, D.Marčetić and S.Milošević, “Critical properties of semi-flexible polymer chains situated within the simple cubic lattice”, *J. Stat. Mech.* (2020) 063208 (17 pages).
 32. **I.Živić**, S.Elezović–Hadžić and D.Marčetić, “Persistence length of semi-flexible polymer chains on Euclidean lattices”, *Physica A* **607** (2022) 128222 (10 pages).
 33. **I.Živić** and S.Elezović–Hadžić, “The local persistence length of semi-flexible self-avoiding walks on the square lattice”, *J. Stat. Mech.* (2024) 023201 (14 pages).

Books

1. **Ivan Živić**, Vukota Babović and Sava Milojević, *Magnetic field – Collection of solved and commented tasks*, Faculty of Science, Kragujevac, 1993. (in serbian)
2. Vladimir Cvjetković, **Ivan Živić** and Vukota Babović, *Experiments in Electromagnetism and Optics*, Faculty of Science, Kragujevac, 1993. (in serbian)
3. S.Milošević and **I.Živić**, “Criticality of self-avoiding walks in fractal porous media” in *Diffusion Processes: Experiment, Theory, Simulation*, Lecture Notes in Physics Vol. 438 pp. 137-145, ed A.Pekalski, Springer–Verlag, Berlin, 1994.
4. Saša Simić and **Ivan Živić**, *Physical Mechanics – laboratory practicum*, Faculty of Science, Kragujevac, 2003. (in serbian)
5. **Ivan Živić**, *Statistical mechanics*, Faculty of Science, Kragujevac, 2006. (in serbian)