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Born: July 6, 1969 Sremska Mitrovica, Serbia

Nationality: Serbian

## Current positions

*Guest W3 Professor*, Institut für Mathematik Freie Universität Berlin

*Associated Professor*, Mathematical Institute Serbian Academy of Sciences and Arts

## Areas of specialization

Discrete Geometry, Algebraic Topology.

## Appointments held

Teaching assistant, Faculty of Mathematics, University of Belgrade	1996-1998
Research assistant, Mathematical Institute SANU	1998-2002
Assistant Professor, Mathematical Institute SANU	2002-2008
Associated Professor, Mathematical Institute SANU	2008-2013
Guest W3 Professor, Technische Universität Berlin	2010-2011
Guest W3 Professor, Freie Universität Berlin	2011-2014

## Education

MSC in Mathematics, University of Belgrade 1996  
PhD in Mathematics, University of Belgrade 2000

## Grants

Advanced methods for cryptology and information processing 2004-2008  
Advanced Techniques of Cryptology, Image Processing and Computational  
Topology for Information Security 2009-2014  
ERC Advanced Grant SDModels no. 247029 2010-2014

## Publications & talks

### Articles under review

Pavle Blagojević, Wolfgang Lück, Günter Ziegler, 2013  
*On highly regular embeddings*,  
arXiv:1305.7483, <http://arxiv.org/abs/1305.7483>

Pavle Blagojević, Wolfgang Lück, Günter Ziegler, 2012  
*Equivariant Topology of Configuration Spaces*,  
arXiv:1207.2852, <http://arxiv.org/abs/1207.2852>  
(submitted to Journal of Topology on 10.10.2012)

Pavle Blagojević, Benjamin Matschke Günter Ziegler, 2009  
*Optimal bounds for the colored Tverberg problem*,  
arXiv:0910.4987, <http://arxiv.org/abs/0910.4987>  
(submitted to Annals of Mathematics on 19.11.2009, report 15.02.2013, revision 22.02.2013.)

### Articles accepted for publication

Pavle Blagojević, Roman Karasev, 2012  
*The Schwarz genus of the Stiefel manifold and counting geometric configurations*,  
arXiv:1211.5003, <http://arxiv.org/abs/1211.5003>  
(to be published in Topology and its Applications)

Pavle Blagojević, Günter Ziegler, 2012  
*Convex Equipartitions via Equivariant Obstruction Theory*  
arXiv:1202.5504, <http://arxiv.org/abs/1202.5504>  
(to be published in Israel Journal of Mathematics)

### Articles in Journals

Imre Bárány, Pavle Blagojević Aleksandra S. Dimitrijevi Blagojević, 2013  
*Functions, measures, and equipartitioning convex  $k$ -fans*,  
Discrete and Computational Geometry 49 (2013) 382–401.  
<http://www.springerlink.com/content/a1u207t121477758/>

- Pavle Blagojević, Boris Bukh, Roman Karasev, 2013  
*Turán numbers for  $K_{s,t}$ -free graphs: topological obstructions and algebraic constructions,*  
 Israel Journal of Mathematics 197 (2013) 199–214.  
<http://link.springer.com/article/10.1007/s11856-012-0184-z>
- Pavle Blagojević, Aleksandra Dimitrijević, Blagojević, 2013  
*A problem related to Barany-Grunbaum conjecture,*  
 Filomat 27 (2013) 103-107.  
<http://www.pmf.ni.ac.rs/pmf/publikacije/filomat/2013/27-1/F27-1-13.pdf>
- Pavle Blagojević, Roman Karasev, 2012  
*Extensions of theorems of Rattray and Makeev,*  
 Topological Methods in Nonlinear Analysis 40 (2012) 189–213.  
<http://www.tmna.ncu.pl/htmls/archives/vol-40-1.html>
- Pavle Blagojević, Benjamin Matschke, Günter Ziegler, 2011  
*Optimal bounds for a colorful Tverberg–Vrećica type problem,*  
 Advances in Mathematics 226 (2011) 5198–5215.  
<http://dx.doi.org/10.1016/j.aim.2011.01.009>
- Pavle Blagojević, Günter Ziegler, 2011  
*The ideal-valued index for a dihedral group action, and mass partition by two hyperplanes,*  
 Topology and its Applications 158 (2011) 1326–1351.  
<http://dx.doi.org/10.1016/j.topol.2011.05.008>
- Pavle Blagojević, Benjamin Matschke, Günter Ziegler, 2011  
*A tight colored Tverberg theorem for maps to manifolds,*  
 Topology and its Applications 158 (2011) 1445–1452.  
<http://dx.doi.org/10.1016/j.topol.2011.05.016>
- Pavle Blagojević, Aleksandra Dimitrijevi Blagojević, John McCleary, 2011  
*Spectral sequences in combinatorial geometry Cheeses, inscribed sets, and Borsuk–Ulam type theorems,*  
 Topology and its Applications 158 (2011) 1920–1936.  
<http://dx.doi.org/10.1016/j.topol.2011.06.035>
- Imre Bárány, Pavle Blagojević, András Szűch, 2010  
*Equipartitioning by a convex 3-fan,*  
 Advances in Mathematics 223 (2010) 579–593.  
<http://dx.doi.org/10.1016/j.aim.2009.08.016>
- Pavle Blagojević, Günter Ziegler, 2009  
*Tetrahedra on deformed spheres and integral group cohomology,*  
 The Electronic Journal of Combinatorics, Volume 16 (2) (2009), R16, 1–11  
[http://www.combinatorics.org/Volume\\_16/PDF/v16i2r16.pdf](http://www.combinatorics.org/Volume_16/PDF/v16i2r16.pdf)

- Pavle Blagojević, Siniša Vrećica, Rade Živaljević, 2009  
*Computational Topology of Equivariant Maps from Spheres to Complements of Arrangements*,  
 Transactions of American Mathematical Society 361 (2009), 1007–1038.  
<http://www.ams.org/journals/tran/2009-361-02/S0002-9947-08-04679-5/>
- Pavle Blagojević, Aleksandra Dimitrijevi Blagojević, John McCleary, 2008  
*Equilateral triangles on a Jordan curve and a generalization of a theorem of Dold*,  
 Topology and its Application 156 (2008) 16–23.  
<http://dx.doi.org/10.1016/j.topol.2008.04.008>
- Pavle Blagojević, Aleksandra Dimitrijević Blagojević, 2007  
*Using Equivariant obstruction Theory in Combinatorial Geometry*,  
 Topology and its Applications 154 (2007) 2635–2655.  
<http://dx.doi.org/10.1016/j.topol.2007.04.007>
- Pavle Blagojević, Aleksandra Dimitrijević Blagojević, Marko Milošević, 2006  
*Weighted partitions of Sphere measures by Hyperplanes*,  
 Filomat 20:1 (2006) 13–22.  
<http://tesla.pmf.ni.ac.yu/org/filomat/f20/f20-1/f20-1-2.ps>
- Pavle Blagojević, Aleksandra Dimitrijević Blagojević, Marko Milošević, 2006  
*Equipartition of Sphere measures by Hyperplanes*, Filomat 20:1 (2006) 1–11.  
<http://tesla.pmf.ni.ac.rs/org/filomat/f20/f20-1/f20-1-1.pdf>
- Pavle Blagojević, Vladimir Grujić, Rade Živaljević, 2005  
*Arrangements of symmetric products of spaces*,  
 Topology and its Applications 148 (2005) 213–232.  
<http://dx.doi.org/10.1016/j.topol.2004.09.001>
- Pavle Blagojević, Vladimir Grujić, Rade Živaljević, 2003  
*Symmetric products of surfaces and the cycle index*,  
 Israel Journal of Mathematics 138 (2003) 61–72.  
<http://link.springer.com/article/10.1007/BF02783419>
- Pavle Blagojević, 2001  
*Homotopy Colimit of Quasi-join Diagrams*,  
 Publications de l’Institut Mathématique (N.S.) 69 (83) (2001) 113–121.  
<http://elib.mi.sanu.ac.rs/files/journals/publ/89/n083p113.pdf>

### Articles in proceedings

- Pavle Blagojević, Benjamin Matschke, Günter Ziegler, 2011  
*A tight colored Tverberg theorem for maps to manifolds (extended abstract)*,  
 In Proc. FPSAC 2011 (Reykjavk, Iceland), Discrete Mathematics and Theoretical  
 Computer Science (DMTCS), Vol. AO, (2011) 183–190. ISSN 1365–8050  
<http://www.dmtcs.org/dmtcs-ojs/index.php/proceedings/article/view/dmAO0117>

- Pavle Blagojević, Boris Bukh, Roman Karasev, 2011  
*Turán numbers for  $K_{s,t}$ -free graphs: topological obstructions and algebraic constructions,*  
 Electronic Notes in Discrete Mathematics 38 (2011) 141–145.  
<http://dx.doi.org/10.1016/j.endm.2011.09.024>  
 The Sixth European Conference on Combinatorics, Graph Theory and Applications, EuroComb 2011
- Pavle Blagojević, Vladimir Grujić, Rade Živaljević, 2002  
*Symmetric products of surfaces; a unifying theme for topology and physics,*  
 in Summer school in modern mathematical physics, Sokobanja 2001, SFIN, XV (A3), Belgrade (2002) 466–491.  
<http://arxiv.org/abs/math/0408417>

### Selected talks

- Using equivariant topology methods in combinatorial geometry,* 2013  
 Applied Topology, Bedlewo, 2013  
<http://bcc.impan.pl/13AppTop/>
- On highly regular embeddings,* 2013  
 Applied Topology, Bedlewo, 2013  
<http://bcc.impan.pl/13AppTop/>
- The Bárány–Larman conjecture and the colored Tverberg theorems,* 2011  
 Mathematisches Forschungsinstitut Oberwolfach, Topological and Geometric Combinatorics, Report No. 08/2011, pages 358–361,  
[DOI:10.4171/OWR/2011/08](https://doi.org/10.4171/OWR/2011/08)
- Equivariant methods in geometric combinatorics,* 2011  
 Topological Methods For The Study Of Discrete Structures, CIRM, France, 2010  
<http://www2.lirmm.fr/arith/wiki/MathInfo2010/TopologicalMethodsForTheStudyOfDiscreteStructures>
- A view on equivariant topology of the configuration spaces,* 2011  
 ERC Workshop *High-Complexity Discrete Geometry*, October 24-27, 2011, Berlin, Germany  
<http://www.mi.fu-berlin.de/math/groups/discgeom/events/workshop2011.html>  
<http://www.mi.fu-berlin.de/math/groups/discgeom/media/Slides/Slides/Blagojevic.pdf>
- On the Trail of Topological Tverberg Conjecture,* 2011  
 DMV Tagung 2011 - Köln, 19-22. September 2011  
[http://www.mi.uni-koeln.de/dmv\\_2011/index/programm/abstractsbook.pdf](http://www.mi.uni-koeln.de/dmv_2011/index/programm/abstractsbook.pdf)

## Teaching

### Undergraduate teaching

Faculty of Mathematics, University of Belgrade

1994-1998

<http://www.matf.bg.ac.rs>

Teaching assistant for the following courses:

- *Analysis I*, 1st year (2 semester) course 4+4,
- *Analysis II*, 2nd year (2 semester) course 4+4,
- *Algebra I*, 2st year (2 semester) course 2+2,
- *Algebra II*, 3st year (2 semester) course 2+2,
- *Analysis III*, 3st year (1 semester) course 2+2.

School of Electrical Engineering, University of Belgrade

1994

<http://etf.bg.ac.rs/>

Teaching assistant for the following course:

- *Mathematics I*, 1st year (1 semester) course 4+4.

### Graduate teaching

Fakultet Tehničkih Nauka, Novi Sad, Serbia

2010-

<http://novi.ftn.uns.ac.rs/>

Berlin Mathematical School, Berlin, Germany

2011-

<http://www.math-berlin.de/about-bms/faculty>

- BMS Advanced course: *Equivariant Topological Combinatorics*,  
<https://www.mi.fu-berlin.de/kvv/course.htm?cid=10266&sid=23>
- BMS Advanced course: *Characteristic Classes*,  
<https://www.mi.fu-berlin.de/kvv/course.htm?cid=11133&sid=27>

### Service to the profession

I am/was a referee for the following journals:

- Mathematische Annalen  
<http://www.springer.com/mathematics/journal/208>
- Advances in Mathematics  
<http://www.journals.elsevier.com/advances-in-mathematics/>
- Discrete & Computational Geometry  
<http://link.springer.com/journal/454>
- Topology and its Applications  
<http://www.journals.elsevier.com/topology-and-its-applications/>
- Discrete Mathematics  
<http://www.journals.elsevier.com/discrete-mathematics/>