

Curriculum Vitae

Stefan Ivanov
Professor of Mathematics,
University of Sofia 'St.Kl.Ohridski', Bulgaria
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Spoken languages: English, Russian.

Permanent address:

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1 *Teaching and research*

Education:

Doctor of mathematical sciences University of Sofia 'St. Kliment Ohridski', 2006, Thesis "Connections with skew-symmetric torsion and special holonomy"

Ph.D. University of Sofia 'St. Kliment Ohridski', 1987, Ph.D.Thesis: "Linear connections on a smooth manifold with structures ", Ph.D. Advisor: Professor George Ganchev.

M.S. Sofia University 'St. Kliment Ohridski', 1982.

B.S. Sofia University 'St. Kliment Ohridski', 1980.

Research Interests:

Riemannian and complex differential geometry, Hermitian surfaces and holomorphic vector bundles, Almost Kähler 4-manifolds, Twistor spaces, Almost Hermitian geometry, Almost contact manifolds, Differential Geometry of manifolds with Exceptional holonomy, parallel spinors and Dirac operators, Harmonic maps, Integrable Hamiltonian systems, Stäckel systems and separation of variables, String theory and related geometries, connections with exceptional holonomy, Calabi-Yau type theorem on compact complex non-Kähler 6-manifold, Quaternionic geometry and quaternionic contact spaces, Quaternionic contact Yamabe problems, extremals and the best constant in the Folland-Stein inequality, Bochner formulas and inequalities for the first eigenvalue of the sub-Laplacian in sub-Riemannian spaces, the limiting cases, sub-Riemannian Mayers-type results.

Teaching Experience:

Professor of Mathematics, Department of Geometry, University of Sofia 'St.Kl.Ohridski', Bulgaria
- undergraduate courses:
- Linear Algebra, Analytic Geometry, Differential Geometry;

- graduate courses for Master degree students:
 - Bochner technics and vanishing theorems;
 - Ricci flow and Li-Yau inequality.

Supervised 17 Masters Dissertations.

Ph.D students:

Supervised six Ph.D. Thesis:

1. Irina Petrova, "Riemannian manifolds with pointwise constant curvature eigenvalues 1997.
2. Bogdan Alexandrov "Dirac operators on hermitian manifolds and vanishing theorems 1999.
3. Ivan Minchev "Differential geometry of metric connections with torsion 2006.
4. Simeon Zamkovoy "Differential geometry of pseudo Riemannian manifold with additional structures 2006.
5. Alexander Petkov, "Riemannian and sub-Riemannian manifolds with additional structures 2014
6. Marina Tchomakova "Geometry of paraquaternionic contact structures", 2025.

Post-docs:

- Dr. Elias Zafiris, Imperial College London, 2003 - 2004.
- Dr. Milan Zlatanovic, University of Nis, Serbia, 2014-3 months, 2015 - 1 month, 2017-3 months, 2018-2 months.

Main Grants

1. Contractor on the Sofia/Bucarest part of the EU network Contract No. EDGE HPRN-2000-00101EDGE under the RTN program (2000-2004).
2. Senior Associate to the Abdus Salam ICTP, Trieste, 2003-2008.
3. The Yamabe problem on the Quaternionic sphere - Contract with the National Academies USA, 2005-2007
4. Max-Plank-Institut of Mathematik, Bonn, 1.02.2007-31.07.2007.
5. Visiting Professor at the University of Pennsylvania, Philadelphia - 3.09.2009-17.12.2009.
6. Visiting Professor at the University of Pennsylvania, Philadelphia - 11.01.2015-23.05.2015.

Editorships

- Annals of Global Analysis and Geometry (2001-)
- <http://www.springer.com/math/analysis/journal/10455>

2 *Positions held*

Professor of Mathematics, Department of Geometry, University of Sofia 'St.Kl.Ohridski' - permanent position

Professor of Mathematics, Institute of Mathematics and Informatics, BAS - year by year temporary position

1. Visiting University of Maryland, USA - April, 1994.
2. Visiting Michigan State University, USA - April, 1994.
3. Visiting University of Oregon, USA - March, 1999
4. Visiting University of Pennsylvania, USA - March, 1999.
5. Visiting University of Maryland, USA - April, 1999.
6. Visiting University of California at Irvine, USA - April, 1999.
7. Visiting University of California at Riverside, USA - April, 1999
8. Visiting Washington University at St. Louis, USA - April, 1999.
9. Visiting Michigan State University, USA - May, 1999.
10. Visiting ICTP, Trieste, Italy - September-December, 1999.
11. Visiting the Dipartimento di matematica universita di Roma "La Sapienza Roma, Italy - November, 1999.
12. Visiting University of Cagliari, Italy - November, 1999.
13. Visiting ICTP, Trieste, Italy - April-June, 2000.
14. Visiting Humboldt University, Berlin, Germany - September - December, 2000.
15. Visiting mathematician at ICTP, Trieste, Italy - September-December, 2001.
16. Visiting the Dipartimento di matematica universita di Roma "La Sapienza Roma, Italy - April, 2002
17. Visiting University of California at Riverside, Riverside, USA - October - November, 2002.
18. Visiting ICTP, Trieste, Italy - September-December, 2003.
19. Visiting the Dipartimento di matematica universita di Roma "La Sapienza Roma, Italy - May, 2004.
20. Visiting Centro di ricerca matematica Ennio De Giorgi, Differential Geometry and Topology 2004, September, 2004.
21. Visiting University of Pennsylvania, Philadelphia, USA - November, 2004.
22. Visiting University of California at Riverside, Riverside, USA - December, 2004.
23. Visiting King's College, University of London, UK - December 2004.
24. Visiting Humboldt University, Berlin, Germany - June-July, 2005.
25. Visiting University of California at Riverside, Riverside, USA - February, 2006.
26. Visiting ICTP, Trieste, September-November, 2006.
27. Visiting mathematician Technische University, Berlin, November-December, 2006.
28. Visiting University of California at Riverside, Riverside, USA - January, 2007.
29. Visiting University of Koeln, Germany - April, 2007.
30. Visiting University of Cambridge, Cambridge, UK - May, 2007.
31. Visiting University of Bilbao, Spain - June, 2008.
32. Visiting ICTP-Trieste, September-November 2008.
33. Visiting University of Bilbao, Spain - June, 2009.
34. Visiting Professor at UPenn, Philadelphia, USA - September - December, 2009.
35. Visiting University of Zaragoza, Spain - December, 2009.

36. Visiting University of Bilbao, Spain - June, 2010.
37. Visiting University of Bilbao, Spain - June, 2011.
38. Visiting University of Bilbao, Spain - June, 2012.
39. Visiting University of Zaragoza, Spain - November, 2012.
40. Visiting University of Bilbao, Spain - June, 2013.
41. Visiting University of Zaragoza, Spain - May 2014.
42. Visiting Masarik University, Brno, Czech Republic, September, 2014.
43. Visiting University of Marburg, Germany, October, 2014.
44. Visiting Professor at UPenn, Philadelphia, USA - January - May, 2015.
45. Visiting Institut of Theoretical Physics-Hannover, Germany, June, 2015.
46. Visiting University of Bilbao, Spain - September, 2015.
47. Visiting Mazarik University, Brno - June, 2016.
48. Visiting University of Zaragoza, Spain, - July, 2016.
49. Visiting University of Bilbao, Spain - July, 2017.
50. Visiting University of Nis, Serbia, October, 2017.
51. Visiting Mazarik University, Brno - September, 2018.
52. Visiting University of Nis, Serbia, November, 2018.

3 *Invited Lectures in international meeting*

1. Odense EDGE-workshop, April 19th-22nd 2001,
<http://edge.imada.sdu.dk/Odense/timetable.php3>.
2. Miraflores, Madrid, EDGE-EAGER Workshop on "New Interfaces between Geometry and Physics 31/5/-6/6/2001.
3. LMS Durham Symposium on Special Structures in Differential Geometry, July 30-August 9, 2001, <http://www.imada.sdu.dk/swann/Durham/>
4. Conference Geometry of low dimensional manifolds and special geometries in C.I.R.M., Luminy, France, June 3 to June 7, 2002.
5. Torino Workshop on 'New perspectives on Holonomy and Submanifolds', Torino, 23-24 April 2004.
6. XIV Fall Workshop on Geometry and Physics September 14-16, 2005, Bilbao.
<http://www.ehu.es/wgp2005>
7. 77th "Rencontre entre Physiciens The'oriciens et Mathe'maticiens" on "Pseudo-Riemannian Geometry and Supersymmetry Strasbourg 22nd-24th September 2005,
<http://www-irma.u-strasbg.fr/irma/seminaires/autres/RCP2005sept.shtml>
8. Workshop "Special Geometries in Mathematical Physics March 13-18, 2006, Kühlungsborn.
<http://www-irm.mathematik.hu-berlin.de/pahlich/tagung-klgsborn/kuehlungsborn.html>
9. Workshop "Quaternionic structures in algebraic geometry University of Glasgow, Glasgow, November 17-18, 2007, <http://maths.gla.ac.uk/mv/Q/QSAG.html>

10. International Workshop on Geometry and Physics: Special Metrics and Supersymmetry, 29th - 31st May 2008, Bilbao, Spain
<http://www.mat.csic.es/webpages/moduli2008/upv>.
11. Workshop on Holonomy Groups and Applications in String Theory at University of Hamburg, July 14 -18, 2008.
<http://www.math.uni-hamburg.de/home/leistner/workshop08/workshop08.html>
12. International Conference Bifurcation Theory, Integrable Systems, and the Bispectral Problem, May 15-19, 2010, Sofia University, Bulgaria, Conference in honor of Emil Horozov's 60th birthday.
<http://www4.ncsu.edu/~bnbakalo/sofia2010/poster.pdf>
13. Workshop on CR, Pseudohermitian and Sasakian Geometry - Neuchatel, 3-5 May 2011
14. Mini-workshop: Vector Distributions and sub-Riemannian Systems 30 March, 2011 - 2 April, 2011, Warsaw <http://bcc.impan.pl/11VDSR/>
15. Geometric structures on complex manifolds: 3-7 October 2011, Laboratory of Algebraic Geometry, Steklov Institute, Moscow <http://bogomolov-lab.ru/GS/index.html>
16. Differential geometry days in honour of Luis A. Cordero) June 27 - 29, 2012, Santiago de Compostela, Spain <http://xtsunxet.usc.es/cordero2012/>
17. Workshop "Symmetries in Differential Geometry and Mathematical Physics (Luxembourg, 3-6 September 2012).
18. First Joint International Meeting RSME-SCM-SEMA-SIMAI-UMI, Special Session "Symplectic and Special Geometries", Bilbao, Spain, June 30 - July 04 2014.
<http://www.ehu.es/en/web/fjim2014/symplectic-geometry-and-special-metrics>
19. International Conference "Mathematics Days in Sofia" July 7-10, 2014, Sofia, Bulgaria;
<http://www.math.bas.bg/mds2014/>
20. International conference "Interactions in Geometry Conference in honour of Johann Davidov and Oleg Mushkarov, August 15th. 2016, Sofia, Bulgaria.
<http://www.math.bas.bg/confgeom/schedule.php>
21. XIX GEOMETRICAL SEMINAR, Zlatibor, Serbia, August 28-September 4, 2016.
<http://tesla.pmf.ni.ac.rs/people/geometrijskiseminarxix/index.php>
22. Workshop on Geometry, Gravity and Supersymmetry, 24.04.2017-29.04.2017, Mainz, Germany.
<https://indico.mitp.uni-mainz.de/event/78/timetable/#20170424>
23. 19th ÖMG-DMV-Congress and Annual DMV meeting, 11.09.2017-15.09.2017, Salzburg, Austria.
<http://oemg-dmv-2017.sbg.ac.at/index.php/program/overview-and-timetables>
<http://oemg-dmv-2017.sbg.ac.at/index.php/differential-geometry-and-topology>
http://fuchsc.sbg.ac.at/congress/Salzburg2017-Book_of_Abstracts.pdf
24. XX GEOMETRICAL SEMINAR, Vrnjacka Banja, Serbia, May 20-May 23, 2018,
<http://tesla.pmf.ni.ac.rs/people/geometrijskiseminarxx/index.php>
25. Geometry and Mathematical physics, Workshop dedicated to the memory of Vasil Tsanov, Sofia, July 15-21, 2019,
http://www.math.stonybrook.edu/~kamenova/tsanov_memorial_workshop/tsanov_memorial_workshop.html
26. Dirac operators in Differential geometry and Global analysis - In the Memory of Thomas Friedrich, 06.10.2019 - 12.10.2019 - Bedlewo Conference Center near Poznan, Poland
<http://wmii.uwm.edu.pl/dirac/>

27. Geometry and Homological Mirror Symmetry, International Hybrid Conference ILMS HSE, Sirius Mathematics Center, Sochi , Russia, December 11 - 14, 2021.
<https://ms.hse.ru/en/siriusdec2021>
28. XXI GEOMETRICAL SEMINAR, Belgrade, Serbia, June 26-July 2, 2022,
<https://poincare.matf.bg.ac.rs/geometricalseminar/speakers.php>
29. XI IECMSA - 2022, Istanbul, Turkey 29.08.2022-01.09.2022.
30. DMV Annual Meeting 2022 in Berlin, September 12-16, 2022,
<https://www.mi.fu-berlin.de/dmv2022/index.html>
31. Generalized and Symplectic Geometry August 14 -18, 2023, Sunny Beach, Bulgaria,
<https://simons.icms.bg/wp-content/uploads/2023/08/Generalized-and-Symplectic-Geometry-titles-and-abstracts.pdf>
32. Training School on Cartan Geometry, Brno, Czechia, September 04-08 2023,
<https://conference.math.muni.cz/cartan/>
33. International Workshop on Geometry of Submanifolds, 2023, Istanbul, Turkey, November 8-10,
<https://www.mi.fu-berlin.de/dmv2022/index.html>
34. XXII GEOMETRICAL SEMINAR, Vrnjacka Banja, Serbia, May 26-May 31, 2024,
<https://tesla.pmf.ni.ac.rs/people/geometrijskiseminarxxii/committee.php#pos>

4 *Lectures in seminars*

1. Geometry and Topology seminar, University of Maryland, USA - April, 1994
2. Differential Geometry seminar, Michigan State University, USA - April, 1994
3. Geometry seminar, University of California at Irvine, USA - April, 1999
4. Geometry and Topology seminar, University of Maryland, USA - April, 1999
5. Differential Geometry seminar, Michigan State University, USA - May, 1999
6. Geometry seminar, University of California at Riverside, USA - April, 1999
7. Differential Geometry seminar, University of Pennsylvania, USA - March, 1999
8. Geometry seminar, Washington University at St. Louis, USA - April, 1999
9. Geometry seminar, Humboldt University, Berlin, Germany - June, 1999
10. Geometry seminar, Technical University, Berlin, Germany - June, 1999
11. Seminario di Topologia Algebrica e Differenziale, Dipartimento di matematica universita di Roma "La Sapienza Roma, Italy - November, 1999
12. Mathematics seminar, University of Cagliari, Cagliari, Italy - November, 1999.
13. Mathematics Seminar at the Abdus Salam ICTP, Italy - November, 1999
14. Mathematics Seminar at the Abdus Salam ICTP, Italy - June, 2000.
15. Geometry seminar, Humboldt University, Berlin, Germany - October, 2000,
16. Mathematics Seminar at the Abdus Salam ICTP, Italy - November, 2001.
17. Seminario di Topologia Algebrica e Differenziale, Dipartimento di matematica universita di Roma "La Sapienza Roma, Italy - April, 2002
18. Geometry seminar, University of California at Riverside, USA - October, 2002

19. Geometry seminar, University of California at Irvine, USA - November, 2002
20. Mathematics Colloquium, Florida International University, USA - November 2002.
21. Math./Physics seminar, University of Pennsylvania, USA - December, 2002.
22. 19. Algebraic Geometry Seminar at the Abdus Salam ICTP, Italy - November, 2003.
23. Seminario di Topologia Algebrica e Differenziale, Dipartimento di matematica universita di Roma "La Sapienza Roma, April, 2004.
24. Math/Phys seminar King's College, University of London, London, December 2004.
25. Geometry seminar, Humboldt University, Berlin, Germany - December, 2005.
26. Algebraic Geometry Seminar at the Abdus Salam ICTP, Italy - November, 2006.
27. Geometry seminar, Technische University, Berlin, Germany - December, 2006.
28. Geometry seminar, Humboldt University, Berlin, Germany - December, 2006.
29. Geometry seminar, University of Koeln, Koeln, Germany - April, 2007.
30. Geometry seminar, University of Cambridge, Cambridge, UK - May, 2007.
31. Geometry seminar, Humboldt University, Berlin, Germany - June, 2007.
32. Mathematics Oberseminar, Max-Plank Institut of Mathematics, Bonn, Germany - July, 2007.
33. Mathematics Oberseminar, University of Koeln, Koeln, Germany - July, 2007.
34. Mathematics seminar, University of Bilbao - December 2007.
35. Mathematics Seminar at the Abdus Salam ICTP, Italy - October, 2008.
36. Mathematics Seminar at the University of Bari, Italy - October, 2008.
37. Mathematics Seminar at the University of Potenza, Italy - October, 2008.
38. Colloquia at the Department of mathematics and statistics, University of New Mexico, Albuquerque, USA - November, 2009
39. Geometry Seminar at the University of Marburg, Germany, January, 2012.
40. Geometry Seminar at the Masarik University, Brno, Czech Republic, September, 2014.
41. Geometry Seminar at the University of Marburg, Germany, October, 2014.
42. String Theory Seminar, Institut of Theoretical Physics-Hannover, Germany, June, 2015
<http://www.itp.uni-hannover.de/than/stringseminar.html>
43. Geometry Seminar Masarik University, Brno, June 2016.
44. Geometric Seminar University of Nis, Serbia, October, 2017.
45. Geometric Seminar University of Nis, Serbia, November, 2018
46. Nigel Hitchin's Informal Seminar, University of Miami, USA, December 2023.