Curriculum Vitae

Velichka Vassileva Milousheva

Address:
Institute of Mathematics and Informatics
Acad. G. Bonchev Str., bl. 8
1113 Sofia,
BULGARIA

Phone: (+359 2) 979-3822; 979-2807
Fax: (+359 2) 971-36-49
E-mail: vmil@math.bas.bg

Education:

- Ph. D. in Mathematics, Institute of Mathematics and Informatics, Bulgarian Academy of Sciencies, Sofia, Bulgaria, advisor Prof. Georgi Ganchev, 2006

- M. Sc. in Mathematics, Sofia University "St. Kliment Ohridski", Sofia, Bulgaria, 1993

Professional experience:

- 2021 – present, Deputy Director of the Institute of Mathematics and Informatics, Bulgarian Academy of Sciences

- 2021 – present, Deputy Director of the International Center for Mathematical Sciences (ICMS-Sofia)

- 2018 – present, Professor, Section of Analysis, Geometry and Topology, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences

- 2017 – 2021, Scientific Secretary of the Institute of Mathematics and Informatics, Bulgarian Academy of Sciences

- 2011 – 2018, Associate Professor, Section of Analysis, Geometry and Topology, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences

- 2010 – 2017, Associate Professor, "L. Karavelov" Civil Engineering Higher School, Sofia

- 2006 – 2011, Research Fellow, Section of Geometry and Topology, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences

- 1994 – 2010, Assistant Professor, "L. Karavelov" Civil Engineering Higher School, Sofia, undergraduate courses: Descriptive geometry, Calculus

- 1993 – 1997, Visiting Assistant Professor, Sofia University "St. Kliment Ohridski", Sofia, undergraduate courses: Analytic geometry, Descriptive geometry

Recent Grants/Fellowships:

- 2021-2025, research project: *Complex Analysis, Differential and Algebraic geometry and Applications*, National Science Fund, Ministry of Education and Science of Bulgaria under contract KP-06-N52/3

- 2017-2021, research project: *Riemannian and Complex Geometry*, National Science Fund, Ministry of Education and Science of Bulgaria under contract DN-12/2

- 2015-2017, research project: *Analysis and Geometry on Riemannian and Complex Manifolds*, National Science Fund, Ministry of Education and Science of Bulgaria under contract DFNI-I 02/14

- January 2011, short visit at Uludağ University, Department of Mathematics, Bursa, 2011

- 2009-2011, research project: *Geometry of Riemannian manifolds with additional structures*, Fund Scientific Research of "L. Karavelov" Civil Engineering Higher School, Sofia, Bulgaria

- 2005-2006, research project: *Geometry of Hypersurfaces in Euclidean Space*, Fund Scientific Research of "L. Karavelov" Civil Engineering Higher School, Sofia, Bulgaria

- 2001 –2004, post-graduate fellowship, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences; advisor Prof. Georgi Ganchev

Fields of interest:

- Differential geometry of surfaces and hypersurfaces in Euclidean and Minkowski spaces
- Local theory of surfaces in pseudo-Euclidean spaces with neutral metric
- Minimal surfaces in four-dimensional pseudo-Euclidean spaces
- Geometry of Riemannian manifolds with two-dimensional distributions
- Hypersurfaces with involutive distributions
- Hypersurfaces of conullity two

Lectures at international conferences and workshops:

- XXII Geometrical Seminar, May 26 – 31, 2024, Vrnjačka Banja, Serbia
- Recent developments in Hodge theory, August 9 - 11, 2023, Sofia, Bulgaria
- Mathematics Days in Sofia, July 10 - 14, 2023, Sofia, Bulgaria
- Differential Geometry Day (DGD 2023), June 21, 2023, Istanbul Medeniyet University, Istanbul, Türkiye
- Quantum Toric Geometry, Generalized Geometries and O-Minimality, May 1 – 5, 2023, Institute of the Mathematical Sciences of the Americas (IMSA), Miami, USA
- Seminar Talk at Florida International University, October 21, 2022, Miami, USA
- XXI Geometrical Seminar, June 26 - July 2, 2022, Belgrade, Serbia

- 11th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2022), August 29 – September 1, 2022, Istanbul, Turkey
- Geometry and Homological Mirror Symmetry, ILMS HSE, Sirius Mathematics Center, Sochi, December 11 – 14, 2021, Sochi, Russia
- Women in Mathematics in South-Eastern Europe, Sofia, Bulgaria, 2020,
- Seminar Informal de Noutăţi Geometrice (SING), October 23, 2020, Iasi, Romania
- Differential Geometry and its Applications, Hradec Králové, Czech Republic, 2019
- Symposium on Differential Models in Geometry, Computer Science and Hydrotechnics, DiMoGeCH, Iasi, 2019
- International Colloquium on Differential Geometry and its Related Fields, V. Tarnovo, 2018
- XX Geometrical seminar, Vrnjačka Banja, Serbia, 2018
- Pure and Applied Differential Geometry - PADGE 2017, KU Leuven, Belgium, 2017
- Mathematics Days in Sofia 2017, Sofia, 2017
- International Workshop on Theory of Submanifolds, Istanbul, 2016
- International Conference on Applied and Pure Mathematics, Iasi, 2015
- XIII Geometry Symposium, Istanbul, 2015
- International Workshop on Geometry of Riemannian and Hermitian Manifolds, Sofia, 2015
- Seventeenth International Conference on Geometry, Integrability and Quantization, Varna, 2015
- International Workshop on Finite Type Submanifolds, Istanbul, Turkey, 2014
- Conference on Geometric Structures in Mathematical Physics, Golden Sands, 2011
- Ninth Symposium on Geometry, Ondokuz Mayis Universitesi, Samsun, Turkey, 2011
- Tenth International Conference on Geometry and Applications, Varna, 2011
- International Conference on Partial Differential Equations and Applications, Sofia, 2011
- Differential Geometry and Its Applications, Brno, Czech Republic, 2010
- International Workshop on Global Analysis and PDE on Manifolds, Sofia, 2010
- International Colloquium on Differential Geometry, V. Tarnovo, 2010
- International Congress on Mathematics MICOM 2009, Ohrid, 2009
- Ninth International Conference on Geometry and Applications, Varna, 2009
- Conference on Differential Geometry, Bedlewo, Poland, 2008
- Eighth International Conference on Geometry and Application, Varna, 2007
- Tenth International Conference on Differential Geometry and Its Applications, Olomouc, Czech Republic, 2007

- Sixth Summer School on Potential Theory and Applications, Sofia, 2007
- New Trends in Mathematics and Informatics, Jubilee International Conference 60 Years Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Sofia, 2007
- Workshop on Geometry of Vector Distributions, Differential Equations, and Variational Problems, Trieste, Italy, 2006
- Eighth International Workshop on Complex Structures and Vector Fields, Sofia, 2006
- Eighth International Conference on Geometry, Integrability and Quantization, Varna, 2006
- Conference on Differential Geometry, Bedlewo, Poland, 2005
- Seventh International Conference on Geometry and Application, Varna, 2005
- Sixth International Workshop on Complex Structures and Vector Fields, Varna, 2002
- Fifth International Conference on Geometry and Application, Varna, 2001
- Third International Conference on Geometry, Integrability and Quantization, Varna, 2001
- Fifth International Workshop on Complex Structures and Vector Fields, Varna, 2000

Membership in Editorial Boards:
- Serdica Mathematical Journal - Co-Editor-in-Chief
- International Journal of Geometry

Membership in Professional Organizations:
- Union of Bulgarian Mathematicians
- American Mathematical Society

Languages:
- Bulgarian – native
- English
- Russian

List of selected papers:

1. Bencheva V., Milousheva, V., *Timelike Surfaces with Parallel Normalized Mean Curvature Vector Field*, Turkish Journal of Mathematics (2024), Vol. 48: No. 2, Article 15, ISSN:1300-0098, https://doi.org/10.55730/1300-0098.3509. **IF: 1.0 (Q2)**

2. Bencheva V., Milousheva, V., *Fundamental Theorems for Timelike Surfaces in the Minkowski 4-Space*, C. R. Acad. Bulg. Sci., vol. 77, no. 2, pp. 167–178, 2024., ISSN: 1310–1331 (Print), 2367–5535 (Online), https://doi.org/10.7546/CRABS.2024.02.01, **IF: 0.3, (Q4)**

3. Bencheva V., Milousheva, V., *Basic Classes of Timelike General Rotational Surfaces in the Four-dimensional Minkowski Space*, Filomat, Vol. 37, No 25 (2023), 8505-8519, https://doi.org/10.2298/FIL2325505B; ISSN: 0354-5180 (Print), ISSN: 2406-0933 (Online), **IF: 0.8, (Q3)**

4. Kanchev, K., Kassabov, O., Milousheva, V., *Explicit solving of the system of natural PDEs of minimal Lorentz surfaces in R^4_2*, Journal of Mathematical Analysis and Applications, Vol. 510, Issue 1, 1 June 2022, 126017, https://doi.org/10.1016/j.jmaa.2022.126017, ISSN: 0022-247X, **IF: 1.417, (Q1)**

5. Kanchev, K., Kassabov, O., Milousheva, V., *Canonical Coordinates and Natural Equation for Lorentz Surfaces in R^3_1*. Mathematics 2021, 9 (23), 3121. https://doi.org/10.3390/math9233121, ISSN: 2227-7390, **IF: 2.258, (Q1)**

6. Kassabov, O., V. Milousheva, *Weierstrass Representations of Lorentzian Minimal Surfaces in R^4_2*, Mediterr. J. Math. Volume 17, issue 6, 199 (2020). https://doi.org/10.1007/s00009-020-01636-x, ISSN: 1660-5446, **IF: 1.216 (Q1)**

7. Y. Aleksieva, V. Milousheva, *Minimal Lorentz surfaces in Pseudo-Euclidean 4-space with Neutral Metric*, Journal of Geometry and Physics, 142 (2019), 240-253, https://doi.org/10.1016/j.geomphys.2019.04. **IF: 1.056 (Q2)**

8. G. Ganchev, V. Milousheva, *Surfaces with Parallel Normalized Mean Curvature Vector Field in Euclidean or Minkowski 4-Space*, Filomat Vol 33, no. 4 (2019), 1135-1145, **IF: 0.848 (Q2)**

9. Y. Aleksieva, V. Milousheva, N.C. Turgay, *General Rotational Surfaces in Pseudo-Euclidean 4-Space with Neutral Metric*, Bull. Malays. Math. Sci. Soc. 41, no. 4 (2018), 1773-1793. **IF: 0.867 (Q2)**

10. B. Bulca, V. Milousheva, *Meridian Surfaces with Constant Mean Curvature in Pseudo-Euclidean 4-space with Neutral Metric*, Mediterr. J. Math. (2017), 14: 48, doi:10.1007/s00009-017-0878-x **IF: 0.922 (Q1)**

11. K. Arslan, V. Milousheva, *Meridian surfaces of elliptic or hyperbolic type with pointwise 1-type Gauss map in Minkowski 4-space*, Taiwanese Journal of Mathematics, **20**, no. 2 (2016), 311-332. DOI: 10.11650/tjm.19.2015.572. **IF: 0.749 (Q2)**

12. Y. Aleksieva, G. Ganchev, V. Milousheva, *On the Theory of Lorentz Surfaces with Parallel Normalized Mean Curvature Vector Field in Pseudo-Euclidean 4-Space*, Journal of the Korean Mathematical Society, **53**, no. 5 (2016), 1077-1100. **IF: 0.441 (Q4)**

13. G. Ganchev, V. Milousheva, *Meridian Surfaces of Elliptic or Hyperbolic Type in the Four-dimensional Minkowski Space*, Math. Commun., **21**, no. 1 (2016), 1-21. **IF: 0.316 (Q4)**

14. V. Milousheva, N.C. Turgay, *Quasi-minimal Lorentz Surfaces with Pointwise 1-type Gauss Map in Pseudo-Euclidean 4-Space*, Journal of Geometry and Physics, 106 (2016), 171-183. DOI: http://dx.doi.org/10.1016/j.geomphys.2016.03.023. (Available online: March 30, 2016). **IF: 0.819 (Q3)**

15. G. Ganchev, V. Milousheva, *Special Classes of Meridian Surfaces in the Four-dimensional Euclidean Space*, Bull. Korean Math. Soc., **52** (2015), no. 6, 2035-2045. http://dx.doi.org/10.4134/BKMS.2015.52.6.2035. **IF: 0.297 (Q3)**

16. G. Ganchev, V. Milousheva, *General rotational surfaces in the four-dimensional Minkowski space*, Turk. J. Math., 38 (2014), 883-895, DOI: 10.3906/mat-1312-10, **IF: 0.311 (Q4)**

17. G. Ganchev, V. Milousheva, *Quasi-minimal Rotational Surfaces in Pseudo-Euclidean Four-dimensional Space*. Cent. Eur. J. Math., 12 (10) (2014), 1586-1601. DOI: 10.2478/s11533-014-0430-1. **IF: 0.578 (Q3)**

18. K. Arslan, B. Bulca, V. Milousheva, *Meridian surfaces in E^4 with pointwise 1-type Gauss map*. Bull. Korean Math. Soc. 51 (2014), No. 3, pp. 911–922, **IF: 0.228 (Q4)**

19. G. Ganchev, V. Milousheva, *Marginally trapped meridian surfaces of parabolic type in the four-dimensional Minkowski space*. International Journal of Geometric Methods in Modern Physics., **10** (10) (2013), Article ID: 1350060, 17 pp, DOI: 10.1142/S0219887813500606, **IF: 0.617 (Q4)**

20. G. Ganchev, V. Milousheva, *Timelike surfaces with zero mean curvature in Minkowski 4-space*. Israel Journal of Mathematics, **196** (2013), 413-433, DOI: 10.1007/s11856-012-0169-y, **IF: 0.659 (Q2)**

21. G. Ganchev, V. Milousheva, *An invariant theory of marginally trapped surfaces in the four-dimensional Minkowski space*. J. Math. Phys., **53** (2012), Article ID: 033705, 15 pp, DOI: 10.1063/1.3693976. **IF: 1.296 (Q2)**

22. G. Ganchev, V. Milousheva, *An invariant theory of spacelike surfaces in the four-dimensional Minkowski space*. Mediterr. J. Math., **9** (2) (2012), 267–294. DOI: 10.1007/s00009-010-0108-2. **IF: 0.641 (Q2)**

23. G. Ganchev, V. Milousheva, *Chen rotational surfaces of hyperbolic or elliptic type in the four-dimensional Minkowski space*. C. R. Acad. Bulgare Sci. **64** (2011), 5, 641-652. **IF: 0.210 (Q4)**

24. G. Ganchev, V. Milousheva, *Invariants and Bonnet-type theorem for surfaces in R^4*. Cent. Eur. J. Math., **8** (6) (2010), 993-1008. **IF: 0.581 (Q3)**

25. N. Kutev, V. Milousheva, *Minimal Surfaces in S^3 Foliated by circles*. Pacific Journal of Mathematics, **248** (2) (2010), 335-354. **IF: 0.549 (Q3)**

26. G. Ganchev, V. Milousheva, *Invariants of lines on surfaces in R^4*. C. R. Acad. Bulgare Sci., **63** (2010) 6, 835-842. **IF: 0.219 (Q3)**

27. V. Milousheva, *General rotational surfaces in R^4 with meridians lying in two-dimensional planes*, C. R. Acad. Buglare Sci., **63** (2010) 3, 339-348. **IF:0.219 (Q3)**

28. N. Kutev, V. Milousheva, *On the Solvability of Nonlinear Elliptic Systems Generating Minimal Foliated Semi-Symmetric Hypersurfaces*. C. R. Acad. Bulgare Sci., **60** (2007) 12, 1259-1264. **IF: 0.106 (Q4)**

29. G. Ganchev, V. Milousheva, *Analytic Characterization of the Minimal and Bi-umbilical Foliated Semi-Symmetric Hypersurfaces in Euclidean space*. C. R. Acad. Bulgare Sci., **60** (2007) 6, 601-606. **IF: 0.106 (Q4)**