

Filip Bročić

Curriculum Vitae

PERSONAL INFORMATION

email	filipvbrocic@gmail.com
website	sites.google.com/view/filip-brocic/home

RESEARCH INTEREST

Symplectic and Contact Topology: invariants of Lagrangian submanifolds

POSITION

Postdoc	2024-2026
Universität Augsburg	Augsburg, Germany

EDUCATION

Ph.D. studies	2020 – 2024
Université de Montréal	Montréal, Canada
Advisor 1: Octav Cornea	
Advisor 2: Egor Shelukhin	
Master studies (GPA 10/10)	2018 - 2019
Univerzitet u Beogradu, Faculty of Mathematics	Belgrade, Serbia
Advisor : Darko Milinković	
Undergraduate studies (GPA 9,82/10)	2014 - 2018
Univerzitet u Beogradu, Faculty of Mathematics	Belgrade, Serbia

PAPERS

- [1] F. Bročić. “A note on the capacities of Lagrangian p-sum”. In: *Annales mathématiques du Québec* 49.1 (2025), pp. 279–286. DOI: <https://doi.org/10.1007/s40316-024-00235-6>.
- [2] F. Bročić, D. Cant, and E. Shelukhin. “The chord conjecture for conormal bundles”. In: *Mathematische Annalen* 392.3 (2025), pp. 3959–4021. DOI: <https://doi.org/10.1007/s00208-025-03171-0>.
- [3] F. Bročić and U. Frauenfelder. “Wrapped Floer homology and the circular restricted three-body problem”. In: *Publications de l’Institut Mathématique* 118 (2025), pp. 1–16. DOI: <https://doi.org/10.2298/PIM2532001B>.
- [4] F. Bročić. “Riemannian distance and symplectic embeddings in the cotangent bundle”. In: *Communications in Contemporary Mathematics* (2024). DOI: <https://doi.org/10.1142/S021919972450024X>.
- [5] F. Bročić and D. Cant. “Bordism classes of loops and Floer’s equation in cotangent bundles”. In: *Journal of Fixed Point Theory and Applications* 26.3 (2024), p. 26. DOI: <https://doi.org/10.1007/s11784-024-01114-x>.

PREPRINTS

- [1] F. Bročić and D. Cant. “Lengths of Reeb chords and Viterbo restriction”. 2026. arXiv: 2606.16270.
- [2] F. Bročić. “Wrapped Floer homology and subcritical handle attachment”. 2025. arXiv: 2507.23290.
- [3] F. Bročić and D. Cant. “Parametric Gromov width of Liouville domains”. 2025. arXiv: 2504.15207.
- [4] F. Bročić and S. Matijević. “A note on the wild symplectic ellipsoids”. 2025. arXiv: 2512.21393.
- [5] F. Bročić and E. Shelukhin. “A counterexample to Lagrangian Poincaré recurrence”. 2024. arXiv: 2409.14225.

AWARDS AND SCHOLARSHIPS

ESP scholarship	2024
ISM scholarship (Institut des sciences mathématiques, Montréal)	2021,2022
Research grant of professors Octavian Cornea and Egor Shelukhin	2020-2024
Faculty of Higher and Postdoctoral Studies scholarship	2020,2021
Université de Montréal - FESP	
Award of Excellence, Faculty of Mathematics, Univerzitet u Beogradu	2016,2018
Scholarship of Ministry of Science and Education of the Republic of Serbia	2015,2016,2017

TALKS

Workshop on Symplectic Topology Univerzitet u Beogradu	17.-21. August, 2026
Symplectic Topology, Hamiltonian Dynamics, and Persistence Structures A conference in honour of Octav Cornea, ETH Zürich	15.-19. June, 2026
Joint PU/IAS Symplectic Geometry Seminar Princeton University	10. March, 2026
Contact Geometry, General Relativity, and Thermodynamics Simons Center for Geometry and Physics	2.-6. March, 2026
Local symplectic seminar Université de Montréal	20. February, 2026
Symplectic Geometry, Gauge Theory, and Low-Dimensional Topology Seminar Stony Brook University	16. February, 2026
Local symplectic seminar Univerzitet u Beogradu	10. February, 2026
Geometry and Topology seminar Uppsala Universitet	22. January, 2026
GeNeSys seminar Université de Neuchâtel	11. November, 2025
Oberseminar Geometry LMU München	7. November, 2025
Symplectic Zoominar online seminar	24. October, 2025
Mechanics Colloquium Mathematical Institute SANU	1. October, 2025
Workshop on Symplectic Topology Univerzitet u Beogradu	18.-22. August, 2025
Topics in Symplectic Geometry Universität Augsburg	2. June, 2025
Symplectic geometry seminar ETH Zürich	12. May, 2025
BACH seminar Ruhr-Universität Bochum	25. April, 2025
Local symplectic seminar Univerzitet u Beogradu	25. March, 2025
Oberseminar Differential Geometry Universität Augsburg	11. November, 2024
Topics in Symplectic Geometry Universität Augsburg	4. November, 2024
Local symplectic seminar Université de Montréal	18. October, 2024
Workshop on Symplectic Topology Univerzitet u Beogradu	19.-23. August, 2024
Local symplectic seminar Université de Montréal	26. January, 2024
Geometry and Dynamics seminar Tel Aviv University	24. January, 2024
Symplectic Zoominar online seminar	5. January, 2024
Workshop on Symplectic Topology Univerzitet u Beogradu	21.-25. August, 2023

Oberseminar Ruhr University, Bochum	20. June, 2023
Local symplectic seminar UQAM, Montréal	11. November, 2022
Workshop on Symplectic Topology Univerzitet u Beogradu	22.-24. August, 2022
Workshop on Symplectic Topology Univerzitet u Beogradu	16.-20. August, 2021
Workshop on Symplectic Topology Univerzitet u Beogradu	19.-23. August, 2019
VIII Mathematical Symposium "Mathematics and application" Univerzitet u Beogradu	17.-18. November, 2017

CONFERENCES

Symplectic Topology A conference in honor of Kai Cieliebak, Universität Augsburg	24.-28. August, 2026
Workshop on Symplectic Topology Univerzitet u Beogradu	17.-21. August, 2026
Symplectic Topology, Hamiltonian Dynamics, and Persistence Structures A conference in honour of Octav Cornea, ETH Zürich	15.-19. June, 2026
Contact Geometry, General Relativity, and Thermodynamics Simons Center for Geometry and Physics	2.-6. March, 2026
Workshop on Symplectic Topology Univerzitet u Beogradu	18.-22. August, 2025
XIII. Bavarian Geometry and Topology meeting Universität Augsburg	24. July, 2025
Workshop on Symplectic Topology Univerzitet u Beogradu	19.-23. August, 2024
Birationality in complex and symplectic geometries UQAM, Montréal	25.-28. September, 2023
Workshop on Symplectic Topology Univerzitet u Beogradu	21.-25. August, 2023
LP-60: Geometry and Dynamics A Conference in Honour of Leonid Polterovich, ETH Zürich	26.-30. June, 2023
2nd Canadian Geometry - Topology seminar UQAM, Montréal	11.-13. November, 2022
Workshop on Symplectic Topology Univerzitet u Beogradu	22.-24. August, 2022
Workshop on Symplectic Topology Univerzitet u Beogradu	16.-20. August, 2021
Workshop on Symplectic Topology Univerzitet u Beogradu	19.-23. August, 2019
CAST 2019 XIII Workshop on Symplectic Geometry, Contact Geometry and Intersections, Berlin	7.-9. March, 2019
Workshop on Symplectic Topology Univerzitet u Beogradu	20.-24. August, 2018
CAST 2018 XII Workshop on Symplectic Geometry, Contact Geometry and Intersections, Uppsala	11.-13. January, 2018
Symplectic Geometry in Lyon A conference in honor of Jean-Claude Sikorav, Lyon	2.-4. November, 2017
Floer homology and homotopy theory, conference UCLA, Los Angeles	17.-21. July, 2017
Floer homology and homotopy theory, summer school UCLA, Los Angeles	10.-14. July, 2017

TEACHING EXPERIENCE

Fall 2025 Course: Differential Topology - The h-cobordism Theorem	Universität Augsburg
Spring 2025 Courses: - H-principles in contact topology - Wrapped Floer homology and handle attachment ¹	Universität Augsburg
Fall 2024 Course: Contact topology	Universität Augsburg
Fall 2019 Courses: - Analysis 1 - Introduction to Theoretical Mechanics	Univerzitet u Beogradu
Spring 2019 Courses: - Analysis 2 - Differential Equations - Mathematical methods of Quantum mechanics	Univerzitet u Beogradu
Fall 2018 Courses: - Analysis 2 - Differential Equations	Univerzitet u Beogradu
Spring 2018 Course: Analysis 2	Univerzitet u Beogradu

WORK EXPERIENCE

Horse rider, stunt or body double	2012 -
Movies and TV shows: - Heroji Halijarda (2023) - Nečista krv (2021) - Crveni mesec (2019) - Outpost (2019) - Kralj Petar Prvi - U slavu Srbije (2018) - Nemanjići – radjanje kraljevine (2017) - Čizmaši (2015) - Sword of Vengeance (2015) - Put ružama posut (2013)	

PERSONAL SKILLS

Languages	Serbian (native), English (fluent)
Computer skills	C, Java, Latex, MATLAB, Microsoft office
Organizational skills Organizer of: - Sports competitions in High school - Masquerade (400 invitations)	
Social skills	Very ambitious, communicative, leadership (President of High school Parliament for 2 years)

HOBBIES AND INTERESTS

Horse riding, billiards, cooking, photography, fishing, basketball

¹Mini-course: part of the course Holomorphic Curves and Quantum Cohomology