## ANTON ZORICH. CURRICULUM VITAE

Name	Anton ZORICH (ZORITCH)
Date of birth Employment Address Email Telephone Citizenship Children	September 3, 1962; Moscow, Russia (ex. USSR) Distinguished Professor, University Paris Cité 8 place Aurélie Nemours, 75013 Paris, France anton.zorich@imj-prg.fr +33 1.57.27.91.92 (office) French, Russian Daria (1983); Katia (1992); Kyrill (2007); Liza (2011)
Education Ph.D. Thesis	1979–1987, Department of Mathematics, Moscow State University Moscow State University, February 1988. Thesis adviser: S. P. Novikov Official reviewers: Yu. I. Manin, S. G. Gindikin
Research domains	Differential topology: leaves of closed 1-forms, surface foliations; forms on supermanifolds Integral geometry: inversion of integral transforms on homogeneous spaces Topological dynamics: homological asymptotics of measured foliations Dynamical systems: interval exchanges; Lyapunov exponents; dynamics in moduli spaces Geometric topology and dynamics: strata in the moduli of Abelian differentials; flat surfaces
Professional experience	<ul> <li>1988–1991 Research fellow, Institute of Academy of Sciences, Moscow, USSR</li> <li>1991–1996 Postdoc, Assistant Professor, Visiting Professor, Research Fellow at RIMS (Kyoto, Japan); UC Davis (USA), SISSA (Trieste, Itally); MSRI (Berkeley, USA); IHES (Bures, France); MPI (Bonn, Germany); Institut Fourier (Grenoble, France); ETH (Zürich, Switzerland); Independent University (Moscow, Russia)</li> <li>1996–2011 Full Professor, University of Rennes 1, France</li> <li>2011– Distinguished Professor, University Paris Cité, France</li> </ul>
Long-term scientific visits (1996–2021)	<ul> <li>Max-Planck-Institut and HIM (Bonn, Germany): thirteen visits of duration 2–12 months</li> <li>IHES (Bures-sur-Yvette, France): ten visits of duration 1–9 months</li> <li>University of Chicago (USA): six visits of duration 2–5 weeks</li> <li>MSRI (Berkeley, USA), ICERM (Providence, USA) (organizer of research semesters)</li> <li>IMPA (Rio, Brazil), ETH (Zürich, Switzerland): visits of several weeks</li> </ul>
Distinctions	<ul> <li>Decerf Prize of French Mathematical Society, 2004 (shared)</li> <li>Sectional talk at ICM, Madrid, 2006; joint results presented by P. Zograf at ICM 2022</li> <li>Talks at Mathematische Arbeitstagung, Bonn, 2007, 2015</li> <li>Kuwait lecture, Cambridge University, 2008</li> <li>Results presented at Seminaire Bourbaki in 2003 (by R. Krikorian); 2012 (by P. Hubert)</li> <li>Senior Member of the Institut Universitaire de France, 2011–2016</li> <li>Chern Visiting Professor, MSRI, Berkeley, USA, 2019</li> <li>Plenary talk at International Congress of Basic Science, Beijing, 2023</li> </ul>
Ph.D. students	<ul> <li>E. Lanneau (2003), S. Lelièvre (2004), C. Boissy (2007), E. Goujard (2014), C. Fougeron (2017),</li> <li>G. Tahar (2017), R. Gutiérrez-Romo (2019) (with. C. Matheus), M. Liu (2022) (with V. Delecroix and B. Petri), S. Barazer (with M. Kontsevich), I. Ren (with M. Kontsevich).</li> </ul>
Invited talks at international conferences	Austria (3), Brazil (4), Canada (4), France (17), Germany (7), Ireland (1), Israel (1), Italy (5), Japan (1), Russia (16), Serbia (1), Singapore (1), South Africa (1), South Korea (1), Spain (2) Sweeden (1), Switzerland (2), UK (6), USA (9) (covered period: 2001 till 2022)
Service for community	<ul> <li>Member of the Sci. Committee of MPIM, Bonn (2016–); of Strategy Committee of IMJ, Paris (2021–) Member of the Best Paper Award Committee, ICBS, Beijing (2023)</li> <li>Editor: J. Modern Dyn. (2006–2017); Diagonales (1998–2011); J. IMJ (2017–2021); Moduli (2023–)</li> <li>Evaluations for CRC and NSERC (Canada), BSF (Israel), ESF (Europe), EMS Prize</li> <li>Coorganizer of international conferences: CIRM, Luminy (2003, 2009, 2012, 2015); HIM, Bonn (2010) AMS, San Francisco (2009); MFO, Oberwolfach (2011, 2014, 2018); MSRI program (2019)</li> <li>Direction of scientific projects: PECO/CEI (1998–2004); ANR (2006; 2010); PICS (2008; 2011)</li> </ul>

## Publications (2014–2023)

- (with V. Delecroix, E. Goujard, and P. Zograf), Heiger genus meanders and Masur-Veech volumes, (2023) arXiv:2304.02567.
- (with V. Delecroix, E. Goujard, and P. Zograf), Large genus asymptotic geometry of random square-tiled surfaces and of random multicurves, Inventiones Mathematicae, 230:1 (2022), 123–224; arXiv:2007.04740.
- 22. (with V. Delecroix, E. Goujard, and P. Zograf), *Counting lattice points in moduli spaces* of quadratic differentials, **Proceedings of the ICM 2022**.
- (with V. Delecroix, E. Goujard, and P. Zograf), Masur-Veech volumes, frequencies of simple closed geodesics and intersection numbers of moduli spaces; Duke Math. Journal, 170:12 (2021), 2633–2718; arXiv:2011.05306.
- (with V. Delecroix, E. Goujard, and P. Zograf), Uniform Lower Bound for Intersection Numbers of ψ-Classes, special issue in honor of Dmitry Fuchs, SIGMA 16 (2020), 086, 13 pages; arXiv:2004.02749.
- 19. (with A. Aggarwal, V. Delecroix, E. Goujard, and P. Zograf), Conjectural large genus asymptotics of Masur-Veech volumes and of area Siegel-Veech constants of strata of quadratic differentials, Arnold Math. Journal, 6:2 (2020), 149–161; arXiv:1912.11702.
- 18. (with V. Delecroix, E. Goujard, and P. Zograf), Enumeration of meanders and Masur-Veech volumes, 80 pp, Forum of Mathematics Pi, 8:4 (2020); arXiv:1705.05190.
- (with V. Delecroix), Cries and whispers in wind-tree forests, "What's Next? The Mathematical Legacy of William P. Thurston." Edited by Dylan P. Thurston, Annals of Mathematics Studies, Number 205, 83–115, Princeton university press, Princeton and Oxford 2020; arXiv:1502.06405.
- Asymptotic values of Siegel—Veech constants, appendix to the paper of A. Aggarwal, Large genus asymptotics for volumes of strata of abelian differentials, Journal of the American Math. Soc. 33:4 (2020) 975–989; arXiv:1804.05431.
- (with V. Delecroix, E. Goujard, and P. Zograf, with appendix of Ph. Engel), Contribution of one-cylinder square-tiled surfaces to Masur-Veech volumes, Some aspects of the theory of dynamical systems: a tribute to Jean-Christophe Yoccoz (volume I), (S. Crovisier, R. Krikorian, C. Matheus, S. Senti eds.); Astérisque 415:1 (2020), 223-274; arXiv:1903.10904.
- 14. Prize for a Mathematical Magic Wand, **Troitskii Variant** 288, p. 2 (24.09.2019) (in Russian).
- (with S. Grushevsky and M. Möller (ed.)) Flat surfaces and algebraic curves, Oberwolfach Rep. 15, no. 3, 2583–2650 (2018).
- Maryam Mirzakhani Memorial, (with H. Barcelo, R. Beheshti I. Coskun, L. DeMarco, D. Dumas, D. Eisenbud, A. Eskin, U. Hamenstädt, S. Kennedy, E. Lindenstrauss, E. Sapir, P. Sarnak, A. Wright, S. Wolpert), Notices of the AMS, 65:11 (2018), 1221–1247.
- 11. (with A. Eskin, M. Kontsevich, and M. Möller), Lower bounds for Lyapunov exponents of flat bundles on curves, Geom. and Topol., 22:4 (2018), 2299–2338; arXiv:1609.01170.
- 10. Maryam Mirzakhani, EMS Newsletter, 107:1 (2018) 28–33.
- Maryam Mirzakhani, Gazette des mathématiciens, 154 (2017), 77-80; http://smf4.emath.fr/Publications/Gazette/2017/154.
- (with J. Athreya and A. Eskin), Right-angled billiards and volumes of moduli spaces of quadratic differentials on CP<sup>1</sup>, Ann. ENS, 49:6 (2016), 1307–1381; arXiv:1212.1660
- (with A. Eskin), Volumes of strata of Abelian differentials and Siegel-Veech constants in large genera, Arnold Mathematical Journal, 1:4 (2015), 481–488, arXiv:1507.05296
- The work of 2014 Fields Medalists: Maryam Mirzakhani, Notices AMS, 62:11 (2015), 1345-1349, http://www.ams.org/notices/201511/rnoti-p1334.pdf
- Le théorème de la baguette magique de A. Eskin et M. Mirzakhani, Gazette des mathématiciens, 142 (2014), 39–54; English translation: arXiv:1502.05654 (2015).
- (with A. Eskin and M. Kontsevich), Sum of Lyapunov exponents of the Hodge bundle with respect to the Teichmüller geodesic flow, Publications de l'IHES, 120:1 (2014), 207–333, arXiv:1112.5872
- (with G. Forni and C. Matheus), Zero Lyapunov exponents of the Hodge bundle, Commentari Math. Helvetici, 89:2 (2014), 489–535. arXiv:1201.6075
- (with J. Athreya and A. Eskin), Counting generalized Jenkins-Strebel differentials, Geometriae Dedicata, 170:1 (2014), 195–217, arXiv:1212.1714.
- (with G. Forni and C. Matheus), Lyapunov spectrum of equivariant subbundles of the Hodge bundle, Ergodic Th. and Dynam. Syst., 34:2 (2014), 353–408, arXiv:1112.0370.