

Alexander GLAZMAN

Curriculum Vitæ

Academic degrees

- 2022 **Habilitation**, *University of Vienna, Austria*
“Phase transitions in two-dimensional lattice models”
- 2016 **Ph.D.**, *University of Geneva, Switzerland*
“Properties of self-avoiding walks and a stress tensor in the $O(n)$ model”. Adv: Stanislav Smirnov
- 2015 **Cand. Sci. Phys. Mat.**, *St Petersburg Department of Steklov Institute, Russia*
“Generalized flowers in k -connected graphs”. Adv: Dmitry Karpov.
- 2011 **Diploma of Mathematician**, *St Petersburg State University, Russia*

Academic employment

- 03/2026–now **Full Professor**, *University of Innsbruck*
- 2024–26 **Associate Professor**, *University of Innsbruck*
- 2022–2024 **Assistant Professor**, *University of Innsbruck*
- Sep-Dec 2021 **Invited lecturer**, *St. Petersburg State University*
- 2020–22 **Postdoc**, *University of Vienna*
- 2019–20 **Postdoc**, *University of Fribourg*
- 2016–19 **Postdoc**, *Tel Aviv University*
- 01–08/2012 **Researcher**, *Chebyshev Laboratory, St. Petersburg*

Academic awards

- 2025 **FWF Astra award**, *€1'000'000 funding for a research project*
<https://www.uibk.ac.at/en/newsroom/2025/drei-astra-preise-an-die-universitat-innsbruck/>

Grants

- 2026–31 **PI**, *Phase transitions and scaling limits*, Austrian Science fund, €1,000,000, University of Innsbruck, Austria, Grant DOI 10.55776/AST1405524
- 2021–24 **PI**, *Order–disorder phase transition in 2D lattice models*, Austrian Science fund, €399,577, Universities of Innsbruck and Vienna, Austria, Grant DOI 10.55776/P34713

- 2018–20 **PI**, *Combinatorial approach to critical 2D lattice models*, Swiss National Science Foundation, CHF 123,307, Tel Aviv University, Israel and University of Fribourg, Switzerland
- 2016–18 **PI**, *Observables in lattice models*, Swiss National Science Foundation, CHF 67,200, Tel Aviv University, Israel

Outreach

- since 2023 **Head of the organizing team of Náboj in Innsbruck, 200-250 participants/year**, *international math competition for pupils, participants from the West of Austria and the North of Italy*, naboj.org
- 2013-16 **Founder of “Club de Math” in Geneva**, *Instructor and organiser of three open mathematical olympiads.*, unige.ch/math/clubmath
- 2007-14 **Teacher of math olympiad classes**, *Russia (St. Petersburg, Kirov, Izhevsk) and Kazakhstan*

Teaching

Teaching experience

- from 2025 **Instructor on BSc courses in German, Innsbruck**
Stochastik I (measure theory, basic probability), Statistics
- 2020–now **Instructor on MSc courses in English, Innsbruck, Vienna (2020-22)**
Measure Theory, Probability Theory (martingales, Brownian motion)
- 2019–current **Instructor on advanced courses on Statistical Mechanics, Innsbruck (2023-present), Vienna (2022), St. Petesburg (2021, online), Tel Aviv (2019)**
- 2019 **Supervisor of minor master thesis in French, University of Fribourg (non-math students)**
- 2010–20 **TA in English/Russian/French/German, St. Petersburg, Geneva, Vienna, Innsbruck**
Quantum mechanics; Probability; Analysis; Algebra; Discrete mathematics; Statistics for biologists

Pedagogical training

- 2024 **Science communication course, 4h, University of Innsbruck**
Science communication under pressure: scientists' survival guide for the public arena
- 2023-24 **University didactics in practice, 9h, University of Innsbruck**
Case study dialogues
- 2023 **Legal foundations of teaching, 4h, University of Innsbruck**
- 2010-11 **Teaching practice, 240h (4 ECTS), St. Petersburg State University**
Teaching an MSc course on Graph Theory with a pedagogical mentorship of Prof. Dmitry Karpov
- 2008-10 **Courses on Psychology and Pedagogy, 132h (3 ECTS), St. Petersburg State University**

Academic service

Supervision and mentorship

- 2025–now **Ulrik Hansen**, *Postdoc*
- 2023–now **David Beck-Tiefenbach**, *PhD student*
- 2022–now **Maran Mohanarangan**, *PhD student*
Cotutelle with Ioan Manolescu (University of Fribourg)
- 2022–25 **Lucas Rey**, *PhD student*, Paris-Dauphine
Co-advisor with Béatrice de Tilière (University Paris Dauphine) and Marcin Lis (TU Vienna)
- 2021–25 **Moritz Dober**, *PhD student*, University of Vienna
- 2024 Mar–Jul **Paul Rax**, *ENS internship*
- 2021–22 **Kieran Ryan**, *Postdoc*
- 2020 Mar–Jul **Emmanuel Michta**, *ENS internship*

Supervision of MSc and BSc thesis

- 2024–now **Florian Willmann**, *MSc thesis “Sharpness of the phase transition in the Baxter-Wu model”*, University of Innsbruck
- 2023 **David Beck-Tiefenbach**, *MSc thesis “The loop $O(n)$ model and Monte Carlo methods in statistical mechanics”*, University of Vienna
- 2022 **Nina Mitrovic**, *BSc thesis “Markov Chains and Mixing Times”*, University of Vienna
- 2022 **Gregor Kirchner**, *BSc thesis “Random walks and electric networks”*, University of Vienna

Conference/workshop organisation

- 2024 **Organizer of a workshop**, *Austrian Stochastic Days 2024*
- 2022 **Member of organising team**, *Austrian Stochastic Days 2022*, University of Vienna

Institutional responsibilities at the University of Innsbruck

- 2024–now **Member of committee**, *New curriculum in BSc in mathematics*
- 2023–now **Co-organiser of the Mathematics Colloquium**, with **Birgit Schörkhuber**
- 2022–now **Co-organiser of the Probability seminar**, with **Ecaterina Sava-Huss**
- 2024–25 **Member of Habilitation committee**, *For Sebastien Court, Tobias Firtz, Tommaso Russo*
- 2024 **Member of committee**, *Hiring TT Assistant Professor*, Mathematics department
- 2023–24 **Member of Faculty Council**, Faculty for Mathematics, Computer Science and Physics

Previous organisational work

- 2021–22 **Founder/organiser of the (Not so) Informal Probability Seminar**
Probability/Math Finance/Combinatorics groups at University of Vienna, TU Vienna, ISTA
- 2015–16 **Seminar in Probability and Mathematical Physics**, *University of Geneva*

Reviewing activity

Inventiones Mathematicae (**Invent. Math.**), Journal of Statistical Physics (**JSP**), Annals of Probability (**AOP**), Communications in Mathematical Physics (**CMP**), Electronic Journal of Probability (**EJP**), Annales de l'Institut Henri Poincaré (**AIHP**) Probabilités et Statistiques (B) and Combinatoires (C), Discrete Math.

Publications

Selected works

- A. Glazman, M. Harel, N. Zelesko Planar percolation and the loop $O(n)$ model (2025), 19pp, arXiv:2508.20917
- M. Dober, A. Glazman, S. Ott Discontinuous transition in 2D Potts: I. Order-disorder interface convergence (2025), 75pp, arXiv:2502.04129
- A. Glazman, P. Lammers, Delocalisation and Continuity in 2D: Loop $O(2)$, Six-Vertex, and Random-Cluster Models (2023), 50pp, accepted to *Communications in Mathematical Physics* (**CMP**), arXiv:2306.01527
- A. Glazman, I. Manolescu, Structure of Gibbs measures of planar FK-percolation and Potts model, *Probability and Mathematical Physics* (**PMP**), Vol. 4 (2023), 46pp, doi:10.2140/pmp.2023.4.209
- H. Duminil-Copin, A. Glazman, R. Peled and Y. Spinka, Macroscopic loops in the loop $O(n)$ model at Nienhuis' critical point, *Journal of the European Mathematical Society* (**JEMS**), 23 (2021), 39pp, doi:10.4171/JEMS/1012

The list of all publications and preprints

Link to all published publications: <https://www.uibk.ac.at/mathematik/personal/glazman/>

19. M. Dober, A. Glazman, S. Ott, Discontinuous transition in 2D Potts: II. Order-Order interface convergence (2026), 58pp, arXiv:2502.04129
18. A. Glazman, M. Harel, N. Zelesko, Planar percolation and the loop $O(n)$ model (2025), 19pp, arXiv:2508.20917
17. M. Dober, A. Glazman, S. Ott, Discontinuous transition in 2D Potts: I. Order-disorder interface convergence (2025), 83pp, arXiv:2502.04129
16. A. Glazman, L. Rey, On loops in the complement to dimers (2024), 24pp, arXiv:2412.11708
15. A. Glazman, P. Lammers, Delocalisation and Continuity in 2D: Loop $O(2)$, Six-Vertex, and Random-Cluster Models (2023), 50pp, accepted to *Communications in Mathematical Physics* (**CMP**), arXiv:2306.01527
14. N. Crawford, A. Glazman, M. Harel, R. Peled, Macroscopic loops in the loop $O(n)$ model via the XOR trick, *Annals of Probability* (**AOP**), Vol. 53 (2025), 31pp, doi:10.1214/24-AOP1712
13. Y. Aoun, M. Dober, A. Glazman, Phase diagram of the Ashkin-Teller model, *Communications in Mathematical Physics* (**CMP**), Vol. 405 (2024), 33pp, doi:10.1007/s00220-023-04925-0

12. A. Glazman, I. Manolescu, Structure of Gibbs measures of planar FK-percolation and Potts model, *Probability and Mathematical Physics (PMP)*, Vol. 4 (2023), 46pp, doi:10.2140/pmp.2023.4.209
11. A. Glazman, R. Peled, On the transition between the disordered and antiferroelectric phases of the 6-vertex model *Electronic Journal of Probability (EJP)* (2023), 59pp, doi:10.1214/23-EJP980
10. A. Glazman, I. Manolescu, Exponential decay in the loop $O(n)$ model: $n > 1, x < \frac{1}{\sqrt{3}} + \varepsilon(n)$. *In and Out of Equilibrium 3: Celebrating Vladas Sidoravicius*, (2021), 13pp, doi:10.1007/978-3-030-60754-8_21
9. A. Glazman, I. Manolescu, Uniform Lipschitz functions on the triangular lattice have logarithmic variations. *Communications in Mathematical Physics (CMP)*, 381 (2021), 71pp, doi:10.1007/s00220-020-03920-z
8. A. Glazman, I. Manolescu, Self-avoiding walk on \mathbb{Z}^2 with Yang–Baxter weights: universality of critical fugacity and 2-point function. *Ann. Ins. Henri Poincaré (AIHP)*, 56 (2020), 25pp, doi:10.1214/19-AIHP1024
7. H. Duminil-Copin, A. Glazman, R. Peled and Y. Spinka, Macroscopic loops in the loop $O(n)$ model at Nienhuis' critical point, *Journal of the European Mathematical Society (JEMS)*, 23 (2021), 39pp, doi:10.4171/JEMS/1012
6. D. Chelkak, A. Glazman, S. Smirnov, Discrete stress-energy tensor as a new observable for $O(n)$ model (2016), 61pp, arXiv:1604.06339
5. H. Duminil-Copin, A. Glazman, A. Hammond and I. Manolescu, On the probability that self-avoiding walk ends at a given point. *Annals of Probability (AOP)*, 44 (2016), 30pp, doi:10.1214/14-AOP993
4. A. Glazman, Connective constant for a weighted self-avoiding walk on \mathbb{Z}^2 . *Electr. Comm. Prob. (ECP)*, 20 (2015), 13pp, doi:10.1214/ECP.v20-3844
3. A. Glazman, Generalized flowers in k-connected graphs. Part II, *Zapiski Nauchnykh Seminarov POMI*, 417 (2013), 47pp, translation in *J. Math. Sci. (N.Y.)*, 204 (2015) doi:10.1007/s10958-014-2197-0
2. A. Glazman, A. Sivatski, D. Stolyarov and P. Zatitski, Forms of higher degree over certain fields, *Zapiski Nauchnykh Seminarov POMI*, 394 (2011), 5pp, translation in *J. Math. Sci. (N.Y.)*, 188 (2013) translation in *J. Math. Sci. (N.Y.)*
1. A. Glazman, Generalized flowers in k-connected graphs, *Zapiski Nauchnykh Seminarov POMI*, 391 (2011), 16pp, translation in *J. Math. Sci. (N.Y.)*, 184 (2012) doi:10.1007/s10958-012-0883-3

Talks

Invited talks at conferences/workshops and colloquia

- 2027 **MATRIX Institute at Creswick (Australia)**, *Percolation, spin systems, and random height functions*
- 2026 **ICTS (Bangalore, India)**, *Geometric methods in Percolation and Spin Models*
- 2026 **Universtiy of Montevideo**, *Plenary speaker at XVII CLAPEM (Latin American congress of probabiltiy and mathematical statistics)*
- 2025 **University of Chile**, *Topological phase transition and localization of random fields*
- 2025 **Sapienza University (Rome)**, *Random Geometric Structures and Statistical Physics*
- 2025 **NYU Shanghai**, *Symposium on Critical Exponents, Scaling Limits and Universality: Challenges from Statistical Physics*
- 2025 **University of Bielefeld**, *Mathematics Colloquium*
- 2025 **University of Cincinnati**, *Math Department Colloquium*
- 2025 **TU Darmstadt**, *Rhein-Main Colloquium Stochastics*
- 2024 **LMU (Munich)**, *Augsburg–Munich Probability colloquium*
- 2024 **ISTA (Austria)**, *Probability meets combinatorics*
- 2024 **ETH Zurich**, *Percolation and random fields*
- 2024 **SwissMAP research station, Les Diablerets (CH)**, *Workshop in Mathematical Physics*
- 2023 **Helsinki**, *Stochastic sauna*
- 2023 **Sorbonne University (Paris)**, *Dimers ANR final conference*
- 2023 **WIAS (Berlin)**, *SP2265 Phase transitions in spatial particle systems*
- 2022 **University of Innsbruck**, *Theory Colloquium (Physics department)*
- 2022 **Université Grenoble Alpes (France)**, *AMS–EMS–SMF meeting*
- 2019 **Banff (Canada)**, *Dimers, Ising model and their interactions*
- 2019 **University of Fribourg (CH)**, *Recent advances in loop models and height functions*
- 2019 **Les Diablerets (CH)**, *Workshop on statistical mechanics*
- 2018 **Oberwolfach**, *Strongly Correlated Random Interacting Processes*
- 2016 **University of Bath (UK)**, *Workshop on Random Interacting systems*
- 2015 **Les Diablerets (CH)**, *Workshop on statistical mechanics*
- 2013 **Simons Center at Stony Brook University (USA)**, *Random tilings*

Seminar talks

2026

BRA **IMPA (mini-course)**, **Federal University of Minas Gerais**

UK **University of Bristol**, **University of Sussex**

2025

- ISR **Tel Aviv University**
SVN **University of Ljubljana**
UK **University of Bath**
US **Princeton, MIT, NYU, Rutgers, Cincinnati**
before 2025
AUT **University of Vienna, TU Vienna**
CH **University of Geneva, EPFL**
DEN **University of Copenhagen**
FRA **IHES**
GER **TU Darmstadt**
FIN **University of Helsinki**
HUN/AUT **Budapest–Vienna probability seminar**
ISR **Tel Aviv University, Bar-Ilan University, Technion, Weizmann Institute**
POL **IMPAN, Warsaw**
RUS **PDMI Steklov, Chebyshev Lab at SPbSU, Ural Federal University**
SWE **Lund University**

Contributed talks

- 2019 **Weizmann institute (Israel)**, *7th Students' Probability Day in Memory of Oded Schramm*
2017 **IMPA (Rio de Janeiro)**, *Brazilian School of Probability*
2015 **Oxford**, *Stochastic processes and applications*
2011 **St. Petersburg**, *First Russian–Finnish symposium on discrete mathematics*

Languages

- fluent English, Russian (native), French
B2-C1 German
A2-B1 Hebrew